

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
2004 and 2006 Biennial Regulatory Reviews - -)	WT Docket No. 10-88
Streamlining and Other Revisions of Parts 1 and)	
17 of the Commission's Rules Governing)	
Construction, Marking and Lighting of Antenna)	
Structures)	
)	
Amendments to Modernize and Clarify Part 17 of)	RM 11349
the Commission's Rules Concerning Construction,)	
Marking and Lighting of Antenna Structures)	

NOTICE OF PROPOSED RULEMAKING

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By the Commission:

TABLE OF CONTENTS

Heading	Paragraph #
I. INTRODUCTION	1
II. BACKGROUND	2
A. Description of the Registration Process	3
B. Biennial Review and PCIA Petition for Rulemaking	6
III. DISCUSSION	8
A. Antenna Structure Registration and Marking and Lighting Specifications	9
1. Provisions Governing Specification of Marking and Lighting	9
2. Accuracy of Location and Height Data	16
3. Structures Requiring FAA Notification	18
4. Pending FAA Rulemaking Proceeding	19
B. Maintenance of Marking and Lighting	21
1. Inspection and Maintenance of Lighting	22
2. Elimination of Unnecessary Provisions	28
3. Records of Extinguishment or Improper Functioning of Lights	32
4. Maintenance of Painting	33
C. Other Matters	36
1. Definitions	36
2. Structures Not Requiring Registration	39
3. Posting of Antenna Structure Registration Number	40
4. Provision of Antenna Structure Registration to Tenants	42

	5.	Notification of Construction or Dismantlement.....	44
	6.	Facilities on Federal Land.....	46
IV.		CONCLUSION	47
V.		PROCEDURAL MATTERS	48
	A.	Regulatory Flexibility Act	48
	B.	Paperwork Reduction Act	49
	C.	Other Procedural Matters	50
	1.	Ex Parte Presentations.....	50
	2.	Comment Filing Procedures	51
	3.	Accessible Formats	54
VI.		ORDERING CLAUSES	55
APPENDIX A: PROPOSED RULE CHANGES			
APPENDIX B: INITIAL REGULATORY FLEXIBILITY ANALYSIS (IRFA)			

I. INTRODUCTION

1. In this Notice of Proposed Rulemaking (Notice), we seek comment on revisions to the Commission's Part 17 rules governing the construction, marking, and lighting of antenna structures.¹ We initiate this proceeding to update and modernize the Part 17 rules. These proposed revisions are intended to improve compliance with these rules and allow us to enforce them more effectively, helping to better ensure the safety of pilots and aircraft passengers nationwide.² These proposed revisions would also remove outdated and burdensome requirements without compromising our statutory responsibility to prevent antenna structures from being hazards or menaces to air navigation.³

II. BACKGROUND

2. Section 303(q) of the Communications Act of 1934, as amended (Act) vests in the Commission the authority to require painting and/or lighting of radio towers that may constitute a hazard to air navigation.⁴ Part 17 of the Commission's rules sets forth procedures for identifying those antenna structures that might affect air navigation, consistent with recommendations made by the Federal Aviation Administration (FAA),⁵ and for registering such structures with the Commission. The Commission

¹ 47 C.F.R. § 17.1 *et seq.* Pursuant to Section 17.2(a) of the rules, "[t]he term antenna structure includes the radiating and/or receive system, its supporting structures and any appurtenances mounted thereon." 47 C.F.R. § 17.2(a).

² See, e.g., In the Matter of Streamlining the Commission's Antenna Structure Clearance Procedure and Revision of Part 17 of the Commission's Rules Concerning Construction, Marking, and Lighting of Antenna Structures, WT Docket No. 95-5, *Report and Order*, 11 FCC Rcd 4272, 4276, para. 6 (1995) (*ASR Streamlining Order*).

³ 47 U.S.C. § 303(q).

⁴ 47 U.S.C. § 303(q).

⁵ Although the Commission has exclusive authority to impose lighting requirements relating to antenna structures, the Commission assigns painting and/or lighting requirements based on the FAA's recommendation as to what painting and/or lighting (if any) is necessary to promote air safety. See *ASR Streamlining Order*, 11 FCC Rcd at 4281, para. 20 (1995) (noting that the Commission's registration process is the federal government's only method of requiring safety lighting, as the FAA does not have statutory authority to mandate the painting or lighting of antenna structures). The Commission has adopted procedures for the registration of antenna structures that are consistent with the FAA's procedures, which require antenna structure owners to provide the FAA with notification of proposed constructions or alterations. The FAA's notification requirements are contained in 14 C.F.R. § 77.13 – 17, and are reprinted on FAA Form 7460-1, "Notice of Proposed Construction or Alteration."

requires owners of antenna structures (rather than the Commission licensees and permittees utilizing those structures)⁶ to register with the Commission those structures that meet the registration criteria and to exercise primary responsibility for the prescribed painting and lighting.⁷

A. Description of the Registration Process

3. Under the Commission's rules, any proposed or existing antenna structure that requires notice of proposed construction to the FAA must be registered with the Commission.⁸ Notification is required for the construction or alteration of any antenna structure that is more than 60.96 meters (200 feet) in height above ground level, or that meets certain other conditions detailed in both sets of rules (such as proximity to an airport runway).⁹ This notification must be made to the FAA using FAA Form 7460-1, Notice of Proposed Construction or Alteration.¹⁰ If the FAA determines that the construction or

⁶ In 1992, Congress amended Sections 303(q) and 503(b)(5) of the Communications Act, respectively, (1) to make non-licensee antenna tower owners, as well as Commission licensees and permittees, responsible for the painting and lighting of antenna structures; and (2) to provide that these non-licensee tower owners may be subject to forfeiture for violations of painting or lighting requirements as specified by the Commission. See Pub. L. No. 102-538, 106 Stat. 3533, enacted October 27, 1992.

⁷ See 47 C.F.R. §§ 17.2(c), 17.4(a). See also *ASR Streamlining Order*, 11 FCC Rcd at 4278, para. 12. The Commission subsequently clarified several registration requirements. See In the Matter of Streamlining the Commission's Antenna Structure Clearance Procedure and Revision of Part 17 of the Commission's Rules Concerning Construction, Marking and Lighting of Antenna Structures, WT Docket No. 95-5, *Memorandum Opinion and Order and Order on Reconsideration*, 15 FCC Rcd 8676 (2000) (*ASR Clarification Order*).

⁸ 47 C.F.R. § 17.4(a).

⁹ See 14 C.F.R. § 77.13; 47 C.F.R. § 17.7. Section 17.7 states:

A notification to the Federal Aviation Administration is required, except as set forth in § 17.14, for any of the following construction or alteration:

- (a) Any construction or alteration of more than 60.96 meters (200 feet) in height above ground level at its site.
- (b) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:
 - (1) 100 to 1 for a horizontal distance of 6.10 kilometers (20,000 feet) from the nearest point of the nearest runway of each airport specified in paragraph (d) of this section with at least one runway more than 0.98 kilometers (3,200 feet) in actual length, excluding heliports.
 - (2) 50 to 1 for a horizontal distance of 3.05 kilometers (10,000 feet) from the nearest point of the nearest runway of each airport specified in paragraph (d) of this section with its longest runway no more than 0.98 kilometers (3,200 feet) in actual length, excluding heliports.
 - (3) 25 to 1 for a horizontal distance of 1.52 kilometers (5,000 feet) from the nearest point of the nearest landing and takeoff area of each heliport specified in paragraph (d) of this section.
- (c) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed an obstruction standard of the FAA.
- (d) Any construction or alteration on any of the following airports (including heliports):
 - (1) An airport that is available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement.
 - (2) An airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and except for military airports, it is clearly indicated that the airport will be available for public use.
 - (3) An airport that is operated by an armed force of the United States.

¹⁰ 14 C.F.R. § 77.17. These notices provide the FAA a basis for, among other things, "[r]ecommendations for identifying the construction or alteration in accordance with the current Federal Aviation Administration Advisory Circular AC 70/7460-1 entitled "Obstruction Marking and Lighting," [...]" 14 C.F.R. § 77.11(b)(3).

alteration proposed in the notification is subject to lighting or marking standards prescribed in the current version of FAA Advisory Circular AC 70/7460-1, entitled “Obstruction Marking and Lighting,” the FAA sends an acknowledgment to the antenna structure owner describing how the structure should be marked and lighted.¹¹ This acknowledgment constitutes a determination of “no hazard to air navigation,” meaning that the FAA has determined that the structure will pose no hazard to aircraft provided it is marked and/or lighted consistent with the FAA’s recommendations.¹²

4. To register the antenna structure, the antenna structure owner must submit to the Commission the FAA’s “no hazard” determination, along with FCC Form 854.¹³ Upon receipt of a registration application, the FCC’s computer automatically verifies with the FAA the accuracy of the marking and lighting specifications provided by the applicant, using the FAA reference number supplied on Form 854. If the registration form, along with the determination of “no hazard,” is accepted by the Commission, then a Form 854R (antenna structure registration) is issued, which typically incorporates the FAA’s specifications for marking and/or lighting the antenna structure, and an antenna structure registration number is assigned to the antenna structure. Once the antenna structure is registered, the owner must ensure that the antenna structure complies with all of the relevant FAA chapters specified on the registration or the owner will be subject to FCC enforcement action.

5. An owner may not change the specifications in the antenna structure registration without prior approval from the FAA and the Commission. An antenna structure owner that wants to change an antenna structure’s specifications must first seek FAA review and concurrence with the change, and then file a request with the Commission to amend the antenna structure registration. The owner must receive Commission approval, in the form of an amended antenna structure registration, prior to changing the marking or lighting on the structure.

B. Biennial Review and PCIA Petition for Rulemaking

6. Section 11 of the Act requires that the Commission, in every even-numbered year beginning in 1998, review all regulations that apply to the operations and activities of any provider of telecommunications service.¹⁴ If any regulations are no longer necessary in the public interest as the result of meaningful economic competition between providers of such service, Section 11 instructs the Commission to repeal or modify the regulations.¹⁵ In 2004, pursuant to Section 11, the Commission

¹¹ 14 C.F.R. § 77.19.

¹² The FAA has proposed to modify and expand the scope of the above-described notification requirements by amending its Part 77 rules (14 C.F.R. Part 77) to include obstruction standards based on radiofrequency transmission characteristics. Under the FAA’s proposal, actions that would trigger a filing requirement would include construction of new facilities that operate on specified frequencies, changes in authorized frequency, addition of new frequencies, increases in effective radiated power or antenna height above certain thresholds, and changes in antenna configuration for communications facilities that operate in specified radio frequency bands, independent of the physical attributes of such facilities. *Notice of Proposed Rulemaking*, Docket No. FAA-2006-25002, Notice No. 06-06, Safe, Efficient Use and Preservation of the Navigable Airspace (*FAA NPRM*), released June 13, 2006. See paras.19-20, *infra*.

¹³ 47 C.F.R. § 17.4(b). The registration process is generally completed online at the Commission’s Antenna Structure Registration website <http://wireless.fcc.gov/antenna/>. This website provides comprehensive information about the registration process and the Part 17 rules.

¹⁴ 47 U.S.C. § 161(a).

¹⁵ 47 U.S.C. § 161(b).

initiated a comprehensive review of its regulations.¹⁶ Among the rules under review were the Commission's Part 17 rules.¹⁷ As part of the review, PCIA – the Wireless Infrastructure Association (PCIA), Cingular Wireless LLC (Cingular), and CTIA – the Wireless Association (CTIA) all filed comments or reply comments urging streamlining and harmonization of the Part 17 rules.¹⁸

7. PCIA also filed a petition for rulemaking (RM 11349) to modernize and clarify Part 17 of the Commission's Rules.¹⁹ PCIA's Petition for Rulemaking seeks five changes to Part 17: (1) elimination of or substantial revision of Section 17.47(b) regarding quarterly inspections of automatic control devices or systems associated with antenna structure lighting; (2) amendment of Sections 17.4(e)-(f) and 17.6(c) to eliminate the requirement that antenna structure owners provide tenants with paper copies of the Antenna Structure Registration (ASR); (3) clarification of Section 17.4(g) to expressly permit posting of the ASR number on a tower's compound fence or gate; (4) amendment of Section 17.23 to update a reference to an FAA Circular and to clarify that FCC marking and lighting specifications for a structure do not change unless the FAA recommends new specifications for that particular structure; and (5) amendment of Section 17.57 to change from 24 hours to 5 days the time in which an antenna structure owner must notify the Commission of completion of construction and/or dismantlement, and to change from "immediately" to 5 days the period for notifying the Commission of changes in height or ownership. PCIA's Petition for Rulemaking was placed on Public Notice to allow interested persons to file statements opposing or supporting it.²⁰ Sprint Nextel Corporation (Sprint Nextel), Cingular, Crown Castle USA, Inc. (Crown Castle), and the National Association of Broadcasters (NAB) filed comments.²¹

¹⁶ *The Commission Seeks Public Comment in the 2004 Biennial Review of Telecommunications Regulations, Public Notice*, 19 FCC Rcd 9090 (2004).

¹⁷ Federal Communications Commission 2004 Biennial Regulatory Review, WT Docket No 04-180, *Wireless Telecommunications Bureau Staff Report*, 20 FCC Rcd 124, 158 (WTB 2005) (2004 Biennial Review WTB Staff Report). See also Federal Communications Commission 2002 Biennial Regulatory Review, WT Docket No.02-310, GC Docket No. 02-390, *Staff Report of the Wireless Telecommunications Bureau*, 18 FCC Rcd 4243, 4252, 4278 (WTB 2002). In the 2004 Biennial Review WTB Staff Report, the Wireless Telecommunications Bureau staff concluded that the Part 17 rules pertain to air safety navigation issues and, therefore, competitive developments did not affect the need for this rule part. The staff recommended, however, that while the Part 17 rules remain necessary in the public interest, certain modifications may be in the public interest for reasons other than those related to competitive developments. The staff therefore recommended that the Commission initiate a proceeding to examine the Part 17 rules and to modify or eliminate, without compromising public safety goals, any rules which create unnecessary administrative burdens or are apt to confuse owners and licensees who attempt to comply with the Part 17 rules. 2004 Biennial Review WTB Staff Report, 20 FCC Rcd at 137, 160.

¹⁸ Comments of PCIA-the Wireless Infrastructure Association, filed July 12, 2004 (PCIA 2004 Biennial Review Comments); Reply Comments of Cingular Wireless, LLC, filed August 16, 2004 (Cingular 2004 Biennial Review Reply Comments); and Reply Comments of CTIA-the Wireless Association, filed August 12, 2004 (CTIA 2004 Biennial Review Reply Comments).

¹⁹ Petition for Rulemaking, RM-11349, In the Matter of Amendments to Modernize and Clarify Part 17 of the Commission's Rules Concerning Construction, Marking and Lighting of Antenna Structures, filed by PCIA – The Wireless Infrastructure Association on September 12, 2006. PCIA also filed this Petition for Rulemaking within the 2006 Biennial Review proceeding as its comments therein. See Federal Communications Commission 2006 Biennial Regulatory Review, WT Docket No. 06-156, *Staff Report of the Wireless Telecommunications Bureau*, 22 FCC Rcd 3006, 3019, para. 37, 3035-3036 (WTB 2007).

²⁰ Consumer & Governmental Affairs Bureau Reference Information Center Petition for Rulemakings Filed, *Public Notice*, Report No. 2794 (rel. October 30, 2006).

²¹ Letter from Patrick T. Donovan, Counsel, Sprint Nextel, to Marlene H. Dortch, Secretary, Federal Communications Commission (Nov. 29, 2006) (Sprint Nextel Rulemaking Comments); Comments of Cingular Wireless, L.L.C. (Nov. 29, 2006) (Cingular Rulemaking Comments); Comments of Crown Castle USA Inc. (Nov. 29, 2006) (Crown Castle Rulemaking Comments); Comments of National Association of Broadcasters (Nov. 29, 2006) (NAB Rulemaking Comments).
(continued....)

III. DISCUSSION

8. This Notice proposes amendments to the Part 17 rules to update and modernize them, including harmonizing them with FAA rules where appropriate. The following discussion will examine the entirety of Part 17, considering: (1) antenna structure registration and marking and lighting specifications; (2) maintenance of marking and lighting; and (3) other matters.

A. Antenna Structure Registration and Marking and Lighting Specifications

1. Provisions Governing Specification of Marking and Lighting

9. The provisions governing specification of marking and lighting for registered antenna structures are set forth in Sections 17.21 through 17.23 of the rules.²² Section 17.21 specifies that painting and lighting of an antenna structure is required if the structure exceeds 200 feet in height or if it requires aeronautical study, unless an applicant can show that absence of (or lesser) marking would not impair air safety.²³ Section 17.22 provides that the Commission will generally assign specifications for painting and lighting in accordance with FAA Circulars referenced in Section 17.23, but also provides that if such painting or lighting is confusing, or endangers rather than assists airmen, the Commission may specify painting or lighting in the individual situation.²⁴ Section 17.23 provides that, unless otherwise specified by the Commission, each new or altered antenna structure to be registered on or after January 1, 1996, must conform to the FAA's painting and lighting recommendations set forth on the structure's FAA determination of "no hazard" as referenced in FAA Advisory Circulars AC 70/7460-1J ("Obstruction Marking and Lighting") and AC 150/5345-43E ("Specification for Obstruction Lighting Equipment"), both of which are incorporated by reference in accordance with 5 U.S.C. § 552(a).²⁵

10. In its 2004 Biennial Review Comments, PCIA states that FAA Advisory Circular AC 70/460-1J referenced in Section 17.23 has been superseded, creating a conflict between the Commission's marking and lighting requirements and the FAA's.²⁶ In the Biennial Review Proceeding, PCIA, CTIA and Cingular propose that Section 17.23 be amended to reference the most recent versions of the FAA Advisory Circulars.²⁷ PCIA seeks this rule change in its Petition for Rulemaking as well.²⁸ In their comments on PCIA's Petition for Rulemaking, Cingular, Crown Castle and NAB agree that the Commission's rules should be consistent with the most recent FAA painting and lighting

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30, 2006) (Crown Castle Rulemaking Comments); and Comments of the National Association of Broadcasters (Nov. 30, 2006) (NAB Rulemaking Comments).

²² 47 C.F.R. §§ 17.21, 17.22, 17.23.

²³ 47 C.F.R. § 17.21.

²⁴ 47 C.F.R. § 17.22.

²⁵ 47 C.F.R. § 17.23. In addition, Section 17.17 provides that the requirements in Section 17.23 do not apply to antenna structures authorized prior to July 1, 1996, and that previously authorized structures may retain their present painting and lighting specifications so long as the overall structure height and site coordinates remain unchanged. 47 C.F.R. § 17.17.

²⁶ PCIA 2004 Biennial Review Comments at 3.

²⁷ PCIA 2004 Biennial Review Comments at 3; CTIA 2004 Biennial Review Reply Comments at 2; Cingular 2004 Biennial Review Reply Comments at 5-6.

²⁸ PCIA Petition for Rulemaking at 15-16.

recommendations.²⁹ In its Petition for Rulemaking, PCIA also seeks to amend Section 17.23 to clarify that the lighting and marking specifications assigned to a structure by the Commission upon registration do not change unless the FAA recommends new specifications for that particular structure.³⁰

11. We propose several revisions to these provisions. First, we agree with commenters that the rules should not reference obsolete editions of the Advisory Circulars. Rather than updating the references in the current rules, however, we propose to delete any reference to Advisory Circulars as unnecessary and potentially confusing. Because each antenna structure owner is clearly notified through the registration process of the specifications that apply to a particular structure, first by the FAA itself in its “no hazard” determination, and then by the Commission in the owner’s antenna structure registration, we believe that specific reference in the rules to particular Advisory Circulars is unnecessary. Such references also may cause confusion if the FAA updates the relevant circulars more frequently than the Commission amends its Part 17 rules.³¹ Also, certain older registrations reference discontinued FCC Form 715/715A rather than the Advisory Circulars. To avoid these results, we propose that the rules require the marking and lighting recommended in the FAA determination and associated study, unless otherwise specified, rather than in any particular circular.³² We seek comment on this proposal, and in particular on whether there are any circumstances in which this approach would not be clear.

12. PCIA proposes that we specify in the rules that lighting and marking requirements do not change unless the FAA recommends new specifications for particular structures. PCIA believes this language is necessary to clarify that a revised FAA Circular does not impose new obligations upon already-approved antenna structures.³³ PCIA also indicates that this proposal seeks rule codification of a statement made on the FCC’s website.³⁴ We seek comment on PCIA’s proposal. We also seek comment on whether, in the event the FAA changes its standards, it may instead be preferable for the Commission to have the flexibility to apply any new standards retroactively. Should we defer in the first instance to the FAA as the expert agency on aircraft navigation safety as to whether revised standards should be applied to existing structures, unless otherwise specified by the FCC?

13. Consistent with this discussion, we propose several specific changes to the rules. Section 17.4 of the rules contains an overview of the antenna structure registration process. We propose adding to Section 17.4 a provision clarifying that the FAA’s recommended specifications are generally mandatory, but that the Commission may specify additional or different requirements. We believe stating this simply up front will provide clarity regarding the central obligation of structure owners.³⁵ We also propose to

²⁹ Circular Rulemaking Comments at 2-3; Crown Castle Rulemaking Comments at 5; NAB Rulemaking Comments at 3.

³⁰ PCIA Petition for Rulemaking at 16.

³¹ We note that in its rules concerning the marking and lighting specifications for structures, the FAA refers to FAA Advisory Circular AC 70/7460-1, *see* 14 C.F.R. § 77.19, or to the “current” FAA Advisory Circular AC 70/7460-1, *see* 14 C.F.R. § 77.11, but does not refer to a particular version. We also note that the FAA has never incorporated by reference specific versions of its advisory circulars into its Part 77 rules. All of the FAA’s advisory circulars, both current and historical, are available on the FAA website: <http://www.faa.gov/>. All of the relevant versions of the FAA Advisory Circular AC 70/7460-1 are also available on the FCC’s website: http://wireless.fcc.gov/antenna/documentation/index.htm?job=documentation_faa.

³² We note that the antenna structure registration issued by the Commission includes the study number for the FAA’s determination.

³³ PCIA Petition for Rulemaking at 16.

³⁴ *Id.* at note 40, citing <http://wireless.fcc.gov/antenna/documentation/paintingLighting.html>, visited July 28, 2006.

³⁵ We also propose a conforming change to Section 1.61(a)(5), 47 C.F.R. § 1.61(a)(5), to reflect this position.

amend Section 17.4 to indicate that no changes may be made to the lighting or marking specifications on an antenna structure registration without prior FAA and Commission approval. We seek comment on these proposals.

14. With respect to Sections 17.21 through 17.23, we first propose to amend Section 17.21(a), which provides that antenna structures shall be painted and lighted when they exceed 60.96 meters (200 feet) in height above ground level or they require special aeronautical study. We propose to instead reference FAA notification requirements.³⁶ We believe that referencing FAA notification requirements will clarify which antenna structures must comply with Section 17.21. We would retain the provision in Section 17.21(b) that the Commission may modify requirements “for painting and/or lighting of antenna structures when it is shown by the applicant that the absence of such marking would not impair the safety of air navigation, or that a lesser marking requirement would insure the safety thereof.”³⁷ We then propose to delete as unnecessary the first sentence of Section 17.22, which provides: “Whenever painting or lighting is required, the Commission will generally assign specifications in accordance with the FAA Advisory Circulars referenced in Section 17.23.”³⁸ We would redesignate as paragraph 17.21(c) the remainder of current Section 17.22, specifying that “[i]f an antenna installation is of such a nature that its painting and lighting in accordance with these specifications are confusing, or endanger rather than assist airmen, or are otherwise inadequate, the Commission will specify the type of painting and lighting or other marking to be used in the individual situation.”³⁹ Finally, we would amend Section 17.23, as discussed above, to replace the reference to specific Advisory Circulars with a more general reference to the FAA’s determination of no hazard and associated study, and to clarify the structure owner’s obligation to comply with any other specifications prescribed by the Commission.⁴⁰ We seek comment on all these proposals.

15. Finally, we propose deleting Section 17.17(a). Our proposed removal of reference to FAA circulars in Section 17.23 would eliminate the need for the stated exception in Section 17.17(a). Moreover, the language in Section 17.17(a) has resulted in some confusion as to what painting and lighting specifications antenna structures authorized prior to July 1, 1996, must maintain.⁴¹ We do not make a specific proposal to amend Section 17.17(b) in this Notice, but we note that we would need to conform Section 17.17(b) to any decision regarding PCIA’s proposal to specify that lighting and marking requirements do not change unless the FAA recommends new specifications for particular structures.⁴² We seek comment on these proposals.

2. Accuracy of Location and Height Data

16. Section 17.4(a)(1) provides that alteration of an existing antenna structure requires a new registration. However, our rules do not define what constitutes an alteration such that a new registration is required. In the *ASR Streamlining Order*, the Commission determined that any change or correction of

³⁶ See 47 C.F.R. § 17.4(a).

³⁷ 47 C.F.R. § 17.21(b).

³⁸ 47 C.F.R. § 17.22.

³⁹ *Id.*

⁴⁰ We also propose a conforming change to Section 17.1, 47 C.F.R. § 17.1.

⁴¹ See, e.g., In the Matter of Haviland Telephone Co., Inc. Owner of Antenna Structure Registration No. 1033509, Haviland, Kansas, File Number EB-02-KC-331, NAL Acct. No. 200232560009, FRN 0005-0815-67, *Forfeiture Order*, 18 FCC Rcd 1472 (EB 2003).

⁴² See paragraph 12, *supra*. As an organizational matter, consistent with other rule changes proposed in this Notice, we propose to move the text of Section 17.17(b) to a new Section 17.24. See proposed Section 17.24.

antenna structure site data of one second or greater in longitude or latitude, or one foot or greater in height, requires a new aeronautical study and a new determination by the FAA.⁴³ The Commission noted that these criteria are consistent with the FAA's standards for when a new notification is required.⁴⁴ In order to clarify the obligations of antenna structure owners, we propose adding a new subsection to Section 17.4 specifying that any change in height of one foot or greater or any change in coordinates of one second or greater requires prior approval from the FAA and the Commission.⁴⁵ We seek comment on this proposal.

17. Consistent with this standard, we also seek comment on whether to amend our rules to require that the height information provided on FCC Form 854 must be accurate within one foot and the coordinates provided in FCC Form 854 must be accurate within one second of longitude and latitude. We further seek comment on whether to require that antenna structure owners must use the most accurate data available when reporting height information and site coordinates, and on whether we should specify a particular survey method. In the *ASR Streamlining Order*, the Commission stated that antenna structure owners "may use surveying tools of differing accuracy, such as maps, GPS receivers, or GPS receivers with differential corrections to obtain site data."⁴⁶ Moreover, in the *ASR Clarification Order*, the Commission declined to mandate a specific accuracy standard for the submission of antenna structure data in deference to the FAA.⁴⁷ It has been our experience, however, that measurements taken using older survey methods may differ significantly from those performed using current GPS technology. In light of developments in technology and practice, we therefore find it appropriate to revisit whether the Commission should specify accuracy standards or survey methods. We ask commenters to address whether we should continue to defer to the FAA's expertise, and whether our promulgation of rules would risk creating conflicts with the FAA's process. Any comments proposing a specific method should explain that method and the benefits of mandating it for new antenna structure registrants.

3. Structures Requiring FAA Notification

18. Section 17.7 of the Commission's rules sets forth which antenna structures require notification to the FAA.⁴⁸ Section 17.14 of the Commission's rules sets forth certain categories of antenna structures that are exempt from notification to the FAA.⁴⁹ Sections 17.7 and 17.14 are restatements of FAA rules. Specifically, Section 17.7 of the Commission's rules is a restatement of Section 77.13 of the FAA's rules.⁵⁰ Section 17.14 of the Commission's rules is a restatement of Section 77.15 of the FAA's rules.⁵¹ These restatements of FAA rules in Commission rules appear to be

⁴³ *ASR Streamlining Order*, 11 FCC Rcd at 4287, para. 35.

⁴⁴ *Id.* at 4287, para. 35, n. 52, citing *ex parte* filing of the FAA dated July 12, 1995.

⁴⁵ See proposed Section 17.4(d).

⁴⁶ *ASR Streamlining Order*, 11 FCC Rcd at 4286, para. 33.

⁴⁷ *ASR Clarification Order*, 15 FCC Rcd at 8678–8679, para. 5. Specifically, the Commission found that "the requirement that antenna structure owners first obtain an aeronautical study from the FAA insures reliability of the antenna structure site data and promotes air safety. [. . .] Because the FAA in the first instance determines whether an antenna structure poses a hazard to air navigation and recommends appropriate painting and lighting, we conclude that it is appropriate that the FAA – and not the FCC – specify the accuracy of site information that is necessary to make its determination."

⁴⁸ 47 C.F.R. § 17.7.

⁴⁹ 47 C.F.R. § 17.14.

⁵⁰ 14 C.F.R. § 77.13.

⁵¹ 14 C.F.R. § 77.15.

unnecessary and duplicative, and their inclusion risks creating confusion in the event the FAA were to change its criteria. We therefore propose to delete Sections 17.7 and 17.14 of the Commission's rules. In lieu of these full restatements of FAA rules, we propose adding cross-references to relevant FAA rules in Section 17.4 of the Commission's rules, which provides that the owner of any proposed or existing antenna structure that requires notice of proposed construction to the FAA must register the structure with the Commission.⁵² We seek comment on this tentative conclusion, and on whether there is any reason the Commission should retain language in its own rules stating which antenna structures require notification to the FAA.

4. Pending FAA Rulemaking Proceeding

19. The FAA's current Part 77 rules set forth regulations pertaining to the physical attributes of objects (including communications facilities) that may affect navigable airspace.⁵³ Under these rules, parties proposing to construct or modify a structure must file a "Notice of Proposed Construction or Alteration" with the FAA. The FAA then conducts an obstruction evaluation to determine whether the proposed structure will pose a hazard to air navigation. The Commission has, in turn, required any antenna structure for which a Notice of Proposed Construction or Alteration must be filed with the FAA to be registered with the Commission as well. As discussed in more detail above, this registration requirement is the vehicle by which the Commission exercises its authority under the Communications Act to require painting and lighting of towers that may constitute a hazard to air navigation.⁵⁴

20. In a Notice of Proposed Rulemaking released in June, 2006, the FAA has proposed to modify its notification rules. Under the FAA's proposal, among other things, events that give rise to a notification requirement would be expanded to include construction of new facilities that operate on specified frequency bands, changes in authorized frequency, addition of new frequencies, increases in effective radiated power or antenna height above certain thresholds, and changes in antenna configuration for communications facilities that operate in specified radio frequency bands, independent of the physical attributes of such facilities.⁵⁵ We seek comment on how the outcome of the proceeding initiated by the *FAA NPRM* may affect any of the matters being considered in the instant proceeding. In particular, we seek comment on whether, if the FAA were to adopt its proposed rules in whole or in part, the Commission should modify any of its rules or change any proposed approaches to issues addressed in this proceeding. In this regard, one such significant issue is whether we should continue to require all instances of "Notice of Proposed Construction or Alteration" required by the FAA to result in an antenna structure registration or amendment of antenna structure registration with the Commission.⁵⁶

B. Maintenance of Marking and Lighting

21. The Part 17 rules also detail certain requirements that concern the maintenance of the marking and lighting on antenna structures. These requirements include inspection and maintenance of lighting, records of extinguishment or improper functioning of lights, and maintenance of painting. We

⁵² 47 C.F.R. § 17.4.

⁵³ 14 C.F.R. Part 77.

⁵⁴ See para. 2, *supra*.

⁵⁵ *Notice of Proposed Rulemaking*, Docket No. FAA-2006-25002, Notice No. 06-06, Safe, Efficient Use and Preservation of the Navigable Airspace (*FAA NPRM*), released June 13, 2006; 71 Fed.Reg. 34028 (June 13, 2006).

⁵⁶ We recognize that, in response to the record developed in its proceeding, the FAA may ultimately determine that it serves the public interest to adopt rules that differ from, or are less extensive than, those proposed in the *FAA NPRM*.

believe that some of these requirements are unnecessarily burdensome to antenna structure owners and may be less effective at preventing hazards to air navigation than certain alternatives. We also believe that some interpretations of these requirements overly complicate our enforcement efforts in this important public safety area. Therefore, we are proposing several amendments and deletions to streamline and clarify these rules.

1. Inspection and Maintenance of Lighting

22. The basic regime governing inspection and maintenance of required lighting is set forth in Sections 17.47, 17.48, and 17.56(a) of the rules. Section 17.47 of the rules requires antenna structure owners to make an observation of the antenna structure's lights at least once each 24 hours either visually or by observing an automatic properly maintained indicator designed to register any failure of such lights or, alternatively, to provide and properly maintain an automatic alarm system designed to detect any failure of such lights and to provide indication of such failure to the owner.⁵⁷ Section 17.47 also requires antenna structure owners to inspect at intervals not to exceed 3 months all automatic or mechanical control devices, indicators, and alarm systems associated with the antenna structure lighting to insure that such apparatus is functioning properly.⁵⁸ Section 17.48(a) of the Rules requires immediate notification to the nearest Flight Service Station (FSS) or office of the FAA of any observed or otherwise known extinguishment or improper functioning of any top steady burning light or any flashing obstruction light, regardless of its position on the antenna structure, not corrected within 30 minutes.⁵⁹ Upon notification of such an incident, the FAA issues a Notice to Airmen (NOTAM) to alert aircraft of the light outage. Section 17.48(b) of the Rules provides that “[a]n extinguishment or improper functioning of a steady burning side intermediate light or lights, shall be corrected as soon as possible, but notification to the FAA or [sic] such extinguishment or improper functioning is not required.”⁶⁰ Section 17.56(a) of the rules requires antenna structure owners to replace or repair lights, automatic indicators or automatic control or alarm systems as soon as practicable.⁶¹

23. In their comments to the 2004 Biennial Review, PCIA, CTIA and Cingular argue that quarterly physical inspection of antenna structures imposes needless and costly burdens and adds nothing to the reliability of the system.⁶² Also, the Commission, initially, and later the Wireless Telecommunications Bureau on delegated authority, have granted several tower owners waivers of Section 17.47(b) of the Rules to permit annual rather than quarterly inspections for their automatic or mechanical control devices, indicators and alarm systems associated with their antenna structure lighting, on the basis that they use advanced monitoring systems.⁶³ In its Petition for Rulemaking, PCIA,

⁵⁷ 47 C.F.R. § 17.47(a).

⁵⁸ 47 C.F.R. § 17.47(b).

⁵⁹ 47 C.F.R. § 17.48(a).

⁶⁰ 47 C.F.R. § 17.48(b).

⁶¹ 47 C.F.R. § 17.56(a).

⁶² PCIA 2004 Biennial Review Comments at 3-4; CTIA 2004 Biennial Review Reply Comments at 2; Cingular 2004 Biennial Review Reply Comments at 6-7.

⁶³ See In the Matter of Requests of American Tower Corporation and Global Signal, Inc. to Waive Section 17.47(b) of the Commission's Rules, WT Docket No. 05-326, *Memorandum Opinion and Order*, 22 FCC Rcd 9743 (2007) (*ATC/GSI Waiver Order*); In the Matter of Petition of Optasite Towers L.L.C. for Waiver of Section 17.47(b) of the Commission's Rules, *Memorandum Opinion and Order*, 22 FCC Rcd 18456 (WTB 2007); In the Matter of Crown Castle USA Inc. Request for Waiver of 47 C.F.R. § 17.47(b), *Memorandum Opinion and Order*, 22 FCC Rcd 21881 (WTB 2007); In the Matter of Request of Global Tower LLC for Waiver of 47 C.F.R. § 17.47(b), *Memorandum Opinion and Order*, 23 FCC Rcd 16531 (WTB 2008); In the Matter of TowerSentry LLC Request for Waiver of 47 (continued....)

consistent with these waiver requests, recommends amendment of Section 17.47(b) of the rules to exempt systems using network operations control (NOC) center-based monitoring technologies from any requirement to regularly inspect all automatic or mechanical systems associated with antenna structure lighting.⁶⁴ Sprint Nextel, Cingular, Crown Castle and NAB all support such a rule amendment.⁶⁵ In its comments on the ATC waiver request, Hark Tower Systems, Inc., also supported this approach.⁶⁶

24. We seek comment on two possible alternative changes to Section 17.47. First, we seek comment on whether to delete Section 17.47 of the rules in its entirety. We are concerned that the current regime, which includes separate requirements for inspecting lighting systems, providing notice of extinguished lights, and replacing malfunctioning lights and monitoring systems, may create ambiguity for antenna structure owners regarding their regulatory obligations. In particular, an antenna structure owner may incorrectly conclude that so long as it performs the inspections required under Section 17.47, it will not be subject to enforcement action if its lights fail to function. Eliminating the inspection requirements under Section 17.47 would make clear that what matters is that the lighting required under the antenna structure registration remains on, or, if required lights become extinguished, that the structure owner promptly request a NOTAM. If these requirements are not met, we may subject the structure owner to enforcement action regardless of the measures it followed to inspect its lighting and monitoring systems; and if these requirements are met, it would be immaterial to us how the structure owner ensured that its lights would remain functioning or NOTAMs would be requested. We seek comment on this possible approach, including on whether inspection requirements are necessary to ensure responsible monitoring of lighting systems.

25. Second, if we determine not to eliminate all inspection requirements, we seek comment on whether to amend Section 17.47(b) to exempt certain systems using NOC center-based monitoring technologies from the requirement to quarterly inspect all automatic or mechanical systems associated with antenna structure lighting. As explained in the *ATC/GSI Waiver Order*, the types of systems used by ATC, GSI, and others reliably diagnose problems, including any failures of control devices, indicators and alarm systems, within real time. Thus, quarterly inspections of such systems may unnecessarily burden antenna structure owners without promoting aircraft navigation safety, and relieving inspection requirements for such towers may encourage tower owners to adopt state-of-the-art systems.⁶⁷ In granting the ATC and GSI waiver requests, the Commission found that the use of advanced technology in those instances provided the benefits of more rapid response for lighting failures, with attendant aircraft safety benefits.⁶⁸ We seek comment on the benefits and drawbacks of eliminating quarterly inspection requirements for systems utilizing advanced self-monitoring technology, and on whether required regular inspections that are less frequent, such as annually, should be retained. We also seek comment as to how the systems to be exempted from the quarterly inspection requirement should be defined.

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C.F.R. § 17.47(b) and Joint Petition of Diamond Communications LLC and Diamond Towers LLC for Waiver of 47 C.F.R. § 17.47(b), *Memorandum Opinion and Order*, 24 FCC Rcd 10274 (WTB 2009); In the Matter of Request of Mobilitie, LLC for Waiver of 47 C.F.R. § 17.47(b) and Flash Technology Request for Waiver of 47 C.F.R. § 17.47, *Memorandum Opinion and Order*, 24 FCC Rcd 11949 (WTB 2009).

⁶⁴ PCIA Petition for Rulemaking at 5-11.

⁶⁵ Sprint Nextel Rulemaking Comments at 1; Cingular Rulemaking Comments at 2; Crown Castle Rulemaking Comments at 2-4; NAB Rulemaking Comments at 2.

⁶⁶ Comments of Hark Tower Systems, Inc., on Request of American Tower Corp. for Waiver of Quarterly Inspections Required by Part 17, WT Docket No. 05-326, filed February 23, 2006, at 4.

⁶⁷ *ATC/GSI Waiver Order*, 22 FCC Rcd at 9748-9749, para. 18.

⁶⁸ *Id.* at 9747, para. 11, 9748, para. 17.

26. We propose to retain the requirement in Section 17.48(a) that antenna structure owners promptly report outages of top steady burning lights or flashing antenna structure lights to the FAA. However, we believe amendment of this provision is necessary to ensure that a NOTAM is maintained so long as any outage continues. The FAA cancels all such notices within 15 days.⁶⁹ However, our rules do not currently require antenna structure owners to notify the FAA if repairs to an antenna structure's lights require more than 15 days. Therefore, we propose to require antenna structure owners to provide continuously active NOTAM notice to the FAA of these lighting outages in accordance with current FAA requirements. Accordingly, antenna structure owners would be required to contact the FAA to extend the lighting outage date after 15 days and provide a return to service date. We seek comment on this proposal. We specifically ask commenters to discuss how we should balance the public interest benefit of having antenna structure owners contact the FAA every 15 days during a light outage against the burden on antenna structure owners of continual notification requirements. We also note that the reporting requirement of Section 17.48(a) requires that the FAA be notified "by telephone or telegraph."⁷⁰ We tentatively conclude that this rule should be updated to require notification by means acceptable to the FAA, which currently is by a nationwide toll-free telephone number for reporting lighting outages,⁷¹ and we seek comment on this proposal.

27. Finally, we request comment on whether our rules should include time frames for replacing or repairing extinguished lights notwithstanding the issuance of a NOTAM, and if so, what those time frames should be. We believe that the current requirements to replace or repair lights "as soon as practicable" (in Section 17.56(a)) or "as soon as possible" (in Section 17.48(b)) may be overly vague, and may engender confusion as to whether diligent efforts to correct lighting malfunctions obviate the need for a NOTAM. Accordingly, we tentatively conclude that these provisions should be deleted. By proposing to delete these rule sections, however, we do not intend to provide antenna structure owners with an unlimited amount of time to repair the lighting systems on their antenna structures, nor do we suggest that antenna structure owners may avoid repairing the lighting systems on their antenna structures indefinitely by continually filing for NOTAMs. Moreover, because the FAA does not accept notifications or issue NOTAMs for extinguished steady burning side intermediate lights, in the absence of Section 17.48(b) our rules would contain no requirements relating to maintenance of these lights. We therefore seek comment on whether we should implement a time limitation for lighting system repairs. If such a requirement is implemented, should it be based on the geographic location of the antenna structure? Should weather conditions be considered when determining the reasonableness of a time period requirement? We seek comment on these proposals.

2. Elimination of Unnecessary Provisions

28. Sections 17.45, 17.51, and 17.56(b) each set forth specific requirements for antenna structure owners to follow in exhibiting or maintaining lights. Section 17.45 of the rules specifies the type of temporary warning lights to be used during construction of antenna structures for which red obstruction lighting is required.⁷² Section 17.51 of the rules requires red obstruction lighting to be on

⁶⁹ "After 15 days, the NOTAM is automatically deleted from the system." See FAA Circular AC-70/7460-1K, Chapter 2 (Light Failure Notification). See also <http://www.faa.gov/atpubs/NTM/NTM.pdf>.

⁷⁰ 47 C.F.R. § 17.48(a).

⁷¹ See <https://oeaaa.faa.gov/oeaaa/external/content/lightOutageReporting.jsp>. The telephone number is 877-487-6867.

⁷² 47 C.F.R. § 17.45.

from sunset to sunrise and high intensity and medium intensity lighting to burn continuously.⁷³ Section 17.56(b) requires that the flash tubes in a high intensity obstruction lighting system shall be replaced whenever the peak effective daytime intensity falls below 200,000 candelas.⁷⁴

29. We note that in their 2004 Biennial Review comments, PCIA, CTIA and Cingular ask that Section 17.51 be amended to harmonize it with Section 17.48 (Notification of Extinguishment or Improper Functioning Lights).⁷⁵ Specifically, PCIA states that Section 17.51 should be revised to provide that a malfunctioning flashing light does not violate Section 17.51, so long as a NOTAM has been sought by the tower owner or operator and issued by the FAA.⁷⁶ PCIA also suggests that Section 17.51 should provide that it is not violated when a malfunction is beyond the control of the tower owner/operator (such as in a power failure).⁷⁷

30. We tentatively conclude that each of these provisions should be deleted because the relevant requirements are specified in the FAA determination of no hazard and associated study for each tower, and the separate identification of specific requirements in our rules is therefore unnecessary and may create ambiguity in cases of conflict. Any antenna structure which is assigned specifications by the FAA for lighting is also assigned Chapter 4 (Lighting Guideline) of FAA Advisory Circular AC 70/7460-1.⁷⁸ This chapter details the type of construction lights, both red and white, that should be used during construction. Chapter 4 also details requirements for the inspection, repair and maintenance of lights. Any antenna structure which is assigned red obstruction, high intensity or medium intensity lighting by the FAA is also assigned the applicable chapter (Chapter 5, 6 or 7) of the same FAA Advisory Circular (AC 70/7460-1) on its antenna structure registration.⁷⁹ We therefore propose to delete each of these rule provisions in order to promote clarity and avoid potential conflicts. We seek comment on this tentative conclusion, and in particular on whether there are any instances in which the FAA would not assign the relevant specifications in its Advisory Circular.

31. We do not agree with the commenters' position that our lighting requirements should include an exception where lights are extinguished due to loss of power beyond the structure owner's control. As discussed above, we are proposing amending Section 17.48 to clearly state the basic requirement to maintain the required lighting or, if lights become extinguished, obtain and maintain a NOTAM. Thus, if lights become extinguished due to loss of power, the structure owner will remain in

⁷³ 47 C.F.R. § 17.51.

⁷⁴ 47 C.F.R. § 17.56(b).

⁷⁵ PCIA 2004 Biennial Review Comments at 4-5; CTIA 2004 Biennial Review Reply Comments at 2; Cingular 2004 Biennial Review Reply Comments at 7-8.

⁷⁶ PCIA 2004 Biennial Review Comments at 4-5.

⁷⁷ *Id.* at 5.

⁷⁸ See also, former FCC Form 715/715A, Paragraph 22.

⁷⁹ See, e.g., FAA Circular AC-70/7460-1K, Chapter 5 (Red Obstruction Light System), Chapter 6 (Medium Intensity Flashing White Obstruction Light Systems) and Chapter 7 (High Intensity Flashing White Obstruction Light Systems). These chapters indicate the time of day each of these lighting systems should be used. For examples of FCC Paragraphs concerning these types of lighting systems, see former FCC Form 715/715A, Paragraphs 2, 11-20. Where necessary, the Wireless Telecommunications Bureau will specify one or more paragraphs from former FCC Form 715/715A as part of an antenna structure registration. Use of this language is an example of exercise, by delegated authority, of the Commission's authority to modify painting or lighting specifications provided by the FAA, articulated in current Sections 17.21(a), 17.22 and 17.23 of the Commission's rules, 47 C.F.R. §§ 17.21(a), 17.22, 17.23. The proposed rules are not intended to affect this practice, and would permit continued exercise of the Commission's authority in this manner.

compliance with the rules if it immediately notifies the FAA and renews the notification every 15 days. We do not believe it is either necessary or consistent with aircraft navigation safety to exempt outages due to loss of power from this process. Moreover, we are not persuaded that the effects of power outages are beyond the control of antenna structure owners, or beyond their ability to remedy. In paragraph 27, above, we seek comment on whether we should establish time limits for repair or replacement of extinguished lights. Any rules that we might adopt setting such time limits would apply to lights that are off due to a power outage. We seek comment on this analysis.

3. Records of Extinguishment or Improper Functioning of Lights

32. Section 17.49 requires antenna structure owners to maintain a record of observed or otherwise known extinguishments or improper functioning of structure lights.⁸⁰ We propose to amend this provision by adding a requirement to maintain such records for two years and provide the records to the Commission upon request. We tentatively conclude that this retention period best balances the Commission's need to determine the compliance record against the burden of record retention on antenna structure owners. We seek comment on this tentative conclusion, and in particular on whether two years is the appropriate retention period. We encourage commenters to provide data regarding the burden this record retention would impose on antenna structure owners, and we invite comment on whether we should eliminate the recordkeeping requirement entirely.

4. Maintenance of Painting

33. Section 17.50 of the rules specifies that antenna structures requiring painting under Part 17 shall be cleaned or repainted as often as necessary to maintain good visibility.⁸¹ In their 2004 Biennial Review Comments, PCIA, CTIA and Cingular argue that the Commission needs an unambiguous standard for measuring good visibility, and suggest that the rule be amended to reflect the standard used by the FAA.⁸² In particular, PCIA proposes that we amend Section 17.50 to require that the "paint on the structure must be within the color tolerance depicted on the FAA's 'In Service Aviation Orange Tolerance Chart' as measured against the base of the tower from a distance of one-quarter mile."⁸³ Cingular states that the current lack of a standard for "good visibility" "leads to the potential for inconsistent enforcement."⁸⁴

34. We request comment on whether to amend Section 17.50 to specifically provide for use of the FAA's 'In Service Aviation Orange Tolerance Chart' to determine whether a structure needs to be cleaned or repainted.⁸⁵ In the field, our Enforcement Bureau currently determines whether a structure needs to be cleaned or repainted by comparing it to the FAA's In Service Aviation Orange Tolerance Chart at the base of the structure and/or by observing the structure at one-quarter mile distance from the structure. We believe that each of these approaches has certain benefits. On one hand, a close inspection of the tower may provide more information about the condition of the paint (*e.g.*, whether it is flaking) and about the actual color and how closely it matches the required parameters. On the other hand, a view from one-quarter mile distance, although subjective, may closely approximate tower visibility and

⁸⁰ 47 C.F.R. § 17.49.

⁸¹ 47 C.F.R. § 17.50.

⁸² PCIA 2004 Biennial Review Comments at 4; CTIA 2004 Biennial Review Reply Comments at 2; Cingular 2004 Biennial Review Reply Comments at 7.

⁸³ See PCIA 2004 Biennial Review Comments at 4.

⁸⁴ Cingular 2004 Biennial Review Reply Comments at 7.

⁸⁵ We note that Section 17.53 of the rules details further the type of paint to be used. 47 C.F.R. § 17.53.

conspicuity that pilots would encounter and therefore may better ensure that towers are visible. However, a view from a distance may be subject to inconsistencies depending upon such factors as direction, time of day, weather conditions, and silhouetting. Adding a specific reference to the color chart in Section 17.50 could provide a more objective standard for gauging the condition of required painting and may provide better guidance for antenna structure owners and promote consistent enforcement. We therefore seek comment on whether to incorporate such a reference.

35. If we do amend the rules to defer to the In Service Aviation Orange Tolerance Chart, we further seek comment on whether to compare the FAA's In Service Aviation Orange Tolerance Chart to the tower at a distance of one quarter mile, as PCIA proposes, or at the base of the tower, as is the Enforcement Bureau's practice. The instructions on the FAA chart direct that "to use the charts place each directly over the surface to be examined."⁸⁶ However, a more distant view may be most consistent with the FAA's Advisory Circular on Obstruction Marking and Lighting, which indicates that "the color should be sampled on the upper half of the structure, since weathering is greater there."⁸⁷ We seek comment on which of these methods of using the chart, or both or neither, should be referenced in the rule. We also seek comment on whether, and if so how, the rule should combine use of the chart with other methods of gauging visibility, as well as any other suggestions on how the rule should be drafted.

C. Other Matters

1. Definitions

36. Section 17.2(a) of the rules defines an "antenna structure" as including "the radiating and/or receive system, its supporting structures and any appurtenances mounted thereon."⁸⁸ Section 17.2(c) defines an "antenna structure owner" as the individual or entity vested with ownership, equitable ownership, dominion, or title to the antenna structure.⁸⁹ Commenters argue that because the definition of "antenna structure" includes antennas and other appurtenances, the definition of "antenna structure owner" could be read to include the service providers who own these antennas.⁹⁰ Commenters therefore urge us to amend our rules to clarify that the obligations of antenna structure owners fall only on the owner of the underlying structure. Specifically, in their comments to the 2004 Biennial Review, PCIA, CTIA and Cingular urge us to revise the definition of antenna structure so that compliance obligations of infrastructure providers and licensed carriers are not ambiguous.⁹¹ PCIA and Cingular both argue that the definition needs to be revised to reinforce Commission decisions that the antenna structure owner is responsible for marking, lighting and notification responsibilities relating to the structure.⁹²

37. The Commission has previously made clear that registration responsibilities fall squarely on the antenna structure owners, and not on the licensees or permittees that are merely tenants of the

⁸⁶ In Service Aviation Orange Tolerance Chart.

⁸⁷ FAA Circular AC-70/7460-1K, Chapter 3 (Marking Guidelines), para. 32(a) [Note].

⁸⁸ 47 C.F.R. § 17.2(a).

⁸⁹ 47 C.F.R. § 17.2(c).

⁹⁰ Appurtenances are included in the definition of "antenna structure" because they need to be accounted for in determining height. See 14 C.F.R. § 77.5(b).

⁹¹ PCIA 2004 Biennial Review Comments at 2; CTIA 2004 Biennial Review Reply Comments at 2; Cingular 2004 Biennial Review Reply Comments at 4-5.

⁹² PCIA 2004 Biennial Review Comments at 2; Cingular 2004 Biennial Review Reply Comments at 4-5.

structures.⁹³ Nonetheless, we agree that incorporating a more precise definition into our rules would promote clarity for all parties. We therefore propose amending Section 17.2(c) to provide that the antenna structure owner is the owner of “the underlying structure that supports or is intended to support antennas and other appurtenances.” We seek comment on this proposal, including any unintended consequences that may result from this change.

38. We also tentatively conclude that Section 17.2(a) should be amended to clarify both when a structure becomes, and when a structure ceases to be, an “antenna structure” under our rules. Section 303(q) of the Act provides that “[i]n the event that the tower ceases to be licensed by the Commission for the transmission of radio energy, the owner of the tower shall maintain the prescribed painting and/or illumination of such tower until it is dismantled”⁹⁴ Consistent with this provision, we propose amending Section 17.2(a) to provide that a structure will continue to be considered an antenna structure and subject to our Part 17 requirements until such time as that structure is dismantled, regardless of whether the structure continues to be used for the transmission and/or receipt of radio energy. Similarly, we believe it is consistent with the intent of Section 303(q) that a structure constructed for the primary purpose of transmitting or receiving radio energy be treated as an antenna structure subject to our rules from the time construction begins, regardless of whether the structure immediately is being used for its intended purpose. We therefore propose amending Section 17.2(a) to reflect this tentative conclusion as well. We seek comment on these proposals. Finally, we note that the term “antenna structure” is defined in both Sections 1.907 and 17.2(a) of the Commission’s rules.⁹⁵ We seek comment on whether these two definitions should be harmonized.

2. Structures Not Requiring Registration

39. Under the Commission’s rules, not all antenna structures must be registered with the Commission, only those of certain heights, depending on their location. Despite this limitation, some antenna structure owners have voluntarily registered their structures with the Commission, even though such registration is not required. We seek comment on whether the rules concerning antenna structures should be enforced against such voluntarily registered structures. In addition, we seek comment on whether owners of antenna structures that do not require registration should be prohibited from registering their towers, and whether antenna structure owners who have voluntarily registered structures should be required to withdraw their registrations from the Commission’s antenna structure database. Such an action could reduce confusion concerning the regulatory status of these structures. We seek comment on both the benefits and drawbacks to the Commission and the public of keeping voluntarily registered structures in the database, as well as of permitting additional structures to be voluntarily registered. In this regard, we note that antenna structure owners often register structures that fall below the Commission’s height thresholds in order to file an Environmental Assessment and obtain a Finding Of No Significant Impact under the Commission’s environmental rules.⁹⁶ We invite comment regarding what changes to our environmental processing may be necessary if antenna structure registration under these circumstances were to be limited.

3. Posting of Antenna Structure Registration Number

⁹³ *ASR Streamlining Order*, 11 FCC Rcd at 4278-4279, para. 12. See also 47 C.F.R. § 17.2(c). We note, however, that “[i]n the event of non-compliance by the antenna structure owner, the Commission may require each licensee and permittee authorized on an antenna structure to maintain the structure, for an indefinite period, in accordance with the Antenna Structure Registration (FCC Form 854R) and the requirements of this part.” 47 C.F.R. § 17.6(b).

⁹⁴ 47 U.S.C. § 303(q).

⁹⁵ 47 C.F.R. §§ 1.907, 17.2(a).

⁹⁶ See 47 C.F.R. §§ 1.1307, 1.1308.

40. Section 17.4(g) provides: “Except as provided in paragraph (h) of this section, the Antenna Structure Registration number must be displayed in a conspicuous place so that it is readily visible near the base of the antenna structure.”⁹⁷ In its Petition for Rulemaking, PCIA contends that it is not always possible to post the ASR number so that it is both “readily visible” and “near the base” of the tower.⁹⁸ PCIA and Cingular both comment that the Commission’s “Posting Guidelines” indicate that in such instances an appropriate place to post the ASR number is “along a perimeter fence” or “at the point of entry of the gate.”⁹⁹ PCIA recommends amendment of the rule to expressly permit posting of the ASR number at a compound fence or gate.¹⁰⁰ Sprint Nextel, Crown Castle, NAB and Cingular concur.¹⁰¹

41. The purpose of Section 17.4(g) is to ensure that a member of the general public can identify the structure in the event of a light outage or other air safety hazard and report the problem to the Commission and/or the FAA, as well as to ensure that FCC and FAA personnel can readily identify the structure. As currently written, however, the rule does not require that the ASR number be posted in a place that would be visible to the general public. We therefore propose to modify Section 17.4 to require that antenna structure owners display the ASR number so that it would be visible to a member of the general public who reaches the closest publicly accessible location near the base of the antenna structure.¹⁰² Where two or more separate locations of this nature exist for a single antenna structure, such as two roads from different directions to a mountaintop site, we would require posting the Antenna Structure Registration number at each such location. We tentatively conclude that amending the rule in this manner would both clarify the obligations of antenna structure owners and promote timely remediation when lighting is observed to be malfunctioning or extinguished. We further tentatively conclude that it is unnecessary for the ASR number to be posted both at the base of the tower and at a point that is visible to the general public. We seek comment on these tentative conclusions, including whether there would be benefits to requiring an additional posting of the ASR number near the base of the tower where that location is not readily visible to the public. We also seek comment on how the rule should address those situations where two towers having separate ASR numbers may be located within a single fenced area, as well as situations in which an antenna structure is located on a building.

4. Provision of Antenna Structure Registration To Tenants

42. Section 17.4(f) requires that antenna structure owners immediately provide copies of FCC Form 854R (antenna structure registration) to each tenant licensee and permittee.¹⁰³ In their Biennial Review comments, PCIA, CTIA and Cingular propose that we eliminate this requirement altogether, and shift the burden to the Commission’s licensees and permittees to obtain a copy of the

⁹⁷ 47 C.F.R. § 17.4(g).

⁹⁸ PCIA Petition for Rulemaking at 14.

⁹⁹ PCIA Petition for Rulemaking at 4, *citing* <<http://wireless.fcc.gov/antenna/about/postingguidelines.html>>; Cingular Rulemaking Comments at 3.

¹⁰⁰ PCIA Petition for Rulemaking at 15.

¹⁰¹ Sprint Nextel Rulemaking Comments at 1-2; Crown Castle Rulemaking Comments at 5; NAB Rulemaking Comments at 3; Cingular Rulemaking Comments at 3.

¹⁰² For example, if a member of the general public enters the premises by a path and is stopped by a locked gate or fence, then the ASR Number should be displayed on or near the gate or the fence.

¹⁰³ 47 C.F.R. § 17.4(f). Sections 17.4(e) and 17.6(c) impose a similar requirement on the first licensee where the antenna structure owner is unable to file Form 854 because it is subject to a denial of Federal benefits under the Anti-Drug Abuse Act of 1988. 47 C.F.R. §§ 17.4(e), 17.6(c); *see* 21 U.S.C. § 862.

Form 854R from the Commission's website.¹⁰⁴ In its Petition for Rulemaking, PCIA specifically recommends that the rule should instead require antenna structure owners to provide tenants with the ASR number or some indication that the ASR has been changed or updated, so that licensees and permittees may obtain relevant Form 845R (antenna structure registration) information from the FCC's ASR Online System.¹⁰⁵ Sprint Nextel, Cingular, Crown Castle and NAB agree, arguing that the requirement to provide paper copies no longer serves any practical purpose and imposes unnecessary costs.¹⁰⁶

43. We agree that antenna structure owners should no longer be required to provide paper copies of the Form 854R to their tenants, as the relevant information and access to the form can ordinarily be provided at least as effectively, and more economically, by electronic means. However, we believe it is essential that the tenant licensees and permittees know when the antenna structure has been registered, and how to access the registration form. We therefore propose to amend the relevant rules to allow antenna structure owners, as an alternative to providing a copy of Form 854R, to notify tenant licensees and permittees that the structure has been registered, and give the tenant licensees and permittees the antenna structure's registration number along with the link for the Commission's antenna structure registration website. This notification may be done using paper mail or electronic mail. We seek comment on this proposal.

5. Notification of Construction or Dismantlement

44. Section 17.57 requires that antenna structure owners notify the Commission within 24 hours of construction or dismantlement of an antenna structure, and immediately for changes in height or ownership.¹⁰⁷ In its Biennial Review comments, PCIA recommends changing Section 17.57 to harmonize the timing for these requirements with FAA rules.¹⁰⁸ In its Petition for Rulemaking, PCIA indicates specifically that its proposal in this regard would be to change from 24 hours to five days the time for notification of construction or dismantlement, and to change from "immediately" to five days the time for notification of changes in height or ownership.¹⁰⁹ Cingular and NAB support the concept of harmonization of the Commission's rules with FAA rules regarding notification of construction and/or dismantlement.¹¹⁰

45. We tentatively conclude that we should not adopt these proposed changes. Initially, we note that neither PCIA nor Cingular cites the relevant FAA requirements or explains why they are appropriate for the Commission's purposes. In any event, these FCC notification requirements promote accuracy of the Commission's information, and it would not appear to create any conflict for them to be stricter than the FAA's. Given the simple nature of notification filings, commenters have not shown that the time frames are unreasonably burdensome. We seek comment on this issue, including discussion of any burdens that the existing rule may impose.

¹⁰⁴ PCIA 2004 Biennial Review Comments at 2-3; CTIA 2004 Biennial Review Reply Comments at 2; Cingular 2004 Biennial Review Reply Comments at 5.

¹⁰⁵ PCIA Petition for Rulemaking at 11-13.

¹⁰⁶ Sprint Nextel Rulemaking Comments at 1; Cingular Rulemaking Comments at 2; Crown Castle Rulemaking Comments at 4-5; NAB Rulemaking Comments at 2-3.

¹⁰⁷ 47 C.F.R. § 17.57.

¹⁰⁸ PCIA 2004 Biennial Review Comments at 5-6.

¹⁰⁹ PCIA Petition for Rulemaking at 17.

¹¹⁰ Cingular Rulemaking Comments at 3; NAB Rulemaking Comments at 3.

6. Facilities on Federal Land

46. Section 17.58 of our rules provides that any application proposing new or modified transmitting facilities to be located on land under the jurisdiction of the U.S. Forest Service or the Bureau of Land Management shall include a statement that the facilities will be so located, and that the applicant shall comply with the requirements of Section 1.70 of the rules. This rule was adopted in 1967, along with former Section 1.70, which prescribed procedures for handling applications involving the use of certain lands and reservations under the jurisdiction of the U.S. Government.¹¹¹ Those procedures were abolished in 1977 at the request of the Department of Agriculture and the Department of the Interior, at which point that iteration of Section 1.70 was deleted.¹¹² As Section 17.58 was intended to promote compliance with procedures that no longer exist, we now propose to delete Section 17.58. We seek comment on this proposal, including whether there is any reason to retain a requirement that the Commission be notified of facilities on Forest Service or Bureau of Land Management lands.

IV. CONCLUSION

47. By this Notice, we propose various clarifications and amendments to the Part 17 rules, in order to allow antenna structure owners to more efficiently and cost effectively ensure their compliance with those rules. We seek comment on these proposals.

V. PROCEDURAL MATTERS

A. Regulatory Flexibility Act

48. As required by the Regulatory Flexibility Act, 5 U.S.C. § 603, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules addressed in this Notice. The IRFA is set forth in Appendix B. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in response to this Notice and must have a separate and distinct heading designating them as responses to the IRFA.

B. Paperwork Reduction Act

49. This document contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

¹¹¹ 32 Fed.Reg. 2890 (Feb. 15, 1967).

¹¹² In the Matter of Amendment of Parts 1, 21, 23, 73, 74, 81, 87, 89, 91, 93, 94, 95, 97 and 99 of the Commission's Rules and Regulations to eliminate the coordination procedures with the U.S. Department of Agriculture and the U.S. Department of Interior when proposing to install or modify transmitting facilities on certain lands under the jurisdiction of these Departments, *Order*, 64 FCC2d 940 (1977).

C. Other Procedural Matters

1. Ex Parte Presentations

50. The rulemaking this Notice initiates shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s ex parte rules.¹¹³ Persons making oral ex parte presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented generally is required.¹¹⁴ Other requirements pertaining to oral and written presentations are set forth in section 1.1206(b) of the Commission’s rules.¹¹⁵

2. Comment Filing Procedures

51. Pursuant to sections 1.415 and 1.419 of the Commission’s rules,¹¹⁶ interested parties may file comments and reply comments regarding the Notice on or before the dates indicated on the first page of this document. All filings related to this Notice of Proposed Rulemaking should refer to WT Docket No. 10-88. Comments may be filed using: (1) the Commission’s Electronic Comment Filing System (ECFS), (2) the Federal Government’s eRulemaking Portal, or (3) by filing paper copies. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://www.fcc.gov/cgb/ecfs/> or the Federal eRulemaking Portal: <http://www.regulations.gov>. Filers should follow the instructions provided on the website for submitting comments.
- ECFS filers must transmit one electronic copy of the comments for WT Docket No. 10-88. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to ecfs@fcc.gov, and include the following words in the body of the message, “get form.” A sample form and directions will be sent in response.
- Paper Filers: Parties who choose to file by paper must file an original and four copies of each filing. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission’s Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, 445 12th Street, S.W., Washington, D.C. 20554.
- All hand-delivered or messenger-delivered paper filings for the Commission’s Secretary must be delivered to FCC Headquarters at 445 12th Street, S.W., Room TW-A325, Washington, DC 20554. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

¹¹³ 47 C.F.R. §§ 1.200 *et seq.*

¹¹⁴ *See* 47 C.F.R. § 1.1206(b)(2).

¹¹⁵ 47 C.F.R. § 1.1206(b).

¹¹⁶ 47 C.F.R. §§ 1.415, 1.419.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail should be addressed to 445 12th Street, S.W., Washington D.C. 20554.

52. Parties should send a copy of their filings to **John Borkowski**, Federal Communications Commission, Room 6404, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to **John.Borkowski@fcc.gov**. Parties shall also serve one copy with the Commission's copy contractor, Best Copy and Printing, Inc. (BCPI), Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C. 20554, (202) 488-5300, or via e-mail to **fcc@bcpiweb.com**.

53. Documents in WT Docket No. 10-88 will be available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, 445 12th Street S.W., Room CY-A257, Washington, D.C. 20554. The documents may also be purchased from BCPI, telephone (202) 488-5300, facsimile (202) 488-5563, TTY (202) 488-5562, e-mail **fcc@bcpiweb.com**.

3. Accessible Formats

54. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to **fcc504@fcc.gov** or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice) or 202-418-0432 (TTY). Contact the FCC to request reasonable accommodations for filing comments (accessible format documents, sign language interpreters, CART, etc.) by e-mail: **FCC504@fcc.gov**; phone: 202-418-0530 or TTY: 202-418-0432.

VI. ORDERING CLAUSES

55. Accordingly, IT IS ORDERED, pursuant to sections 4(i), 4(j), 11 and 303(q) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i)-(j), 161, 303(q), that this Notice in WT Docket No. 10-88 IS ADOPTED.

56. IT IS FURTHER ORDERED that the Commission's Consumer & Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Proposed Rule Changes

The Federal Communications Commission proposes to amend 47 C.F.R. Parts 1 and 17 as set forth below:

PART 1 – PRACTICE AND PROCEDURE

1. The authority citation for Part 1 would continue to read as follows:

Authority: 15 U.S.C. 79 *et. seq.*; 47 U.S.C. 151, 154(j), 155, 157, 225, and 303(r).

2. Section 1.61 would be amended by revising subparagraph (5) of paragraph (a) to read as follows:

§ 1.61 Procedures for handling applications requiring special aeronautical study.

* * * * *

(5) Upon receipt of FCC Form 854, and attached FAA final determination of “no hazard,” the Bureau may prescribe antenna structure painting and/or lighting specifications or other conditions in accordance with the FAA airspace recommendation. Unless otherwise specified by the Bureau, the antenna structure must conform to the FAA’s painting and lighting recommendations set forth in the FAA’s determination of “no hazard” and the associated FAA study number. The Bureau returns a completed Antenna Structure Registration (FCC Form 854R) to the registrant. If the proposed structure is disapproved the registrant is so advised.

* * * * *

PART 17 – CONSTRUCTION, MARKING, AND LIGHTING OF ANTENNA STRUCTURES

1. The authority citation for Part 17 would continue to read as follows:

Authority: 47 U.S.C. §§ 154, 303.

2. Section 17.1 would be amended by revising paragraph (b) to read as follows:

§ 17.1 Basis and purpose.

* * * * *

(b) The purpose of this part is to prescribe certain procedures for antenna structure registration and standards with respect to the Commission's consideration of proposed antenna structures which will serve

as a guide to antenna structure owners.

3. Section 17.2 would be amended by revising paragraphs (a), (b) and (c) to read as follows:

§ 17.2 Definitions.

(a) *Antenna structure.* The term antenna structure means a structure that is constructed or used for the primary purpose of supporting antennas to transmit and/or receive radio energy, and any antennas and other appurtenances mounted thereon, from the time construction of the supporting structure begins until such time as the supporting structure is dismantled.

(b) *Antenna farm area.* A geographical location, with established boundaries, designated by the Federal Communications Commission, in which antenna towers with a common impact on aviation may be grouped.

(c) *Antenna structure owner.* For the purposes of this part, an antenna structure owner is the individual or entity vested with ownership, equitable ownership, dominion, or title to the underlying structure that supports or is intended to support antennas and other appurtenances. Notwithstanding any agreements made between the owner and any entity designated by the owner to maintain the antenna structure, the owner is ultimately responsible for compliance with the requirements of this part.

(d) * * *

4. Section 17.4 would be amended by revising it in its entirety to read as follows:

§ 17.4 Antenna structure registration.

(a) The owner of any proposed or existing antenna structure that requires notice of proposed construction to the Federal Aviation Administration (FAA) must register the structure with the Commission. (See 14 C.F.R. § 77.13 for FAA notification requirements.) This includes those structures used as part of stations licensed by the Commission for the transmission of radio energy, or to be used as part of a cable television head end system. If a Federal Government antenna structure is to be used by a Commission licensee, the structure must be registered with the Commission. If the FAA exempts an antenna structure from notification, it is exempt from registration with the Commission. (See 14 C.F.R. § 77.15 for FAA exemptions to its notification requirements.)

- (1) For a proposed antenna structure or alteration of an existing antenna structure, the owner must register the structure prior to construction or alteration.
- (2) For a structure that did not originally fall under the definition of “antenna structure,” the owner must register the structure prior to hosting a Commission licensee.
- (b) Except as provided in paragraph (i) of this section, each owner must file FCC Form 854 with the Commission. Additionally, each owner of a proposed structure referred to in paragraph (a) of this section must submit a valid FAA determination of "no hazard." In order to be considered valid by the Commission, the FAA determination of "no hazard" must not have expired prior to the date on which FCC Form 854 is received by the Commission. The height of the structure will include the highest point of the structure including any obstruction lighting or lightning arrester.
- (c) Absent Commission specification, the painting and lighting specifications recommended by the FAA are mandatory (see Section 17.23). However, the Commission may specify painting and/or lighting requirements for each antenna structure registration in addition to or different from those specified by the FAA.
- (d) Any change in the overall height of one foot or greater or coordinates of one second or greater in longitude or latitude of an antenna structure requires prior approval from the FAA and the Commission.
- (e) Any change in the marking and lighting specifications described on any antenna structure registration requires prior approval from the FAA and the Commission.
- (f) If an Environmental Assessment is required under § 1.1307 of this chapter, the Bureau will address the environmental concerns prior to processing the registration.
- (g) If a final FAA determination of "no hazard" is not submitted along with FCC Form 854, processing of the registration may be delayed or disapproved.
- (h) The Commission shall issue, to the registrant, FCC Form 854R, Antenna Structure Registration, which assigns a unique Antenna Structure Registration Number. The structure owner shall immediately provide to all tenant licensees and permittees notification that the structure has been registered, along with either a copy of Form 854R or the Antenna Structure Registration Number and a link to the FCC antenna

structure website <http://wireless.fcc.gov/antenna/>. This notification may be done electronically or via paper mail.

(i) If the owner of the antenna structure cannot file FCC Form 854 because it is subject to a denial of Federal benefits under the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, the first tenant licensee authorized to locate on the structure (excluding tenants that no longer occupy the structure) must register the structure using FCC Form 854, and provide a copy of the Antenna Structure Registration (FCC Form 854R) to the owner. The owner remains responsible for providing to all tenant licensees and permittees notification that the structure has been registered, consistent with paragraph (h) of this section, and for posting the registration number as required by paragraph (j) of this section.

(j) Except as described in paragraph (k) of this section, the Antenna Structure Registration Number must be displayed so that it is conspicuously visible and legible from the publicly accessible area nearest the base of the antenna structure along the publicly accessible roadway or path. If the base of the antenna structure has more than one point of ingress/egress, the Antenna Structure Registration Number must be posted at the publicly accessible area nearest each such point of ingress/egress. Materials used to display the Antenna Structure Registration Number must be weather-resistant and of sufficient size to be easily seen at the base of the antenna structure or at a publicly accessible location.

(k) The owner is not required to post the Antenna Structure Registration Number in cases where a federal, state, or local government entity provides written notice to the owner that such a posting would detract from the appearance of a historic landmark. In this case, the owner must make the Antenna Structure Registration Number available to representatives of the Commission, the FAA, and the general public upon reasonable demand.

5. Section 17.6 would be amended by revising its caption, and by revising paragraph (c), to read as follows:

§ 17.6 Responsibility for painting and lighting compliance.

* * * * *

(c) If the owner of the antenna structure cannot file FCC Form 854 because it is subject to a denial of federal benefits under the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862, the first licensee authorized to locate on the structure must register the structure using FCC Form 854, and provide a copy of the Antenna Structure Registration (FCC Form 854R) to the owner. The owner remains responsible for providing to all tenant licensees and permittees notification that the structure has been registered, consistent with § 17.4(h), and for posting the registration number as required by § 17.4(j).

6. The Title of Subpart B would be revised to read as follows:

Subpart B – Antenna Farm Areas.

7. Section 17.7 would be removed and reserved.

8. Section 17.14 would be removed and reserved.

9. Section 17.17 would be removed and reserved.

10. Section 17.21 would be amended by revising its introductory language, revising paragraph (a) and adding paragraph (c) to read as follows:

§ 17.21 Painting and lighting, when required.

Antenna structures shall be painted and lighted when:

(a) Their height exceeds any obstruction standard requiring notification to the FAA (see Section 17.4(a) of this Subpart).

(b) * * *

(c) If an antenna installation is of such a nature that its painting and lighting specifications in accordance with the FAA airspace recommendation are confusing, or endanger rather than assist airmen, or are otherwise inadequate, the Commission will specify the type of painting and lighting or other marking to be used in the individual situation.

11. Section 17.22 would be removed and reserved.

12. Section 17.23 would be revised to read as follows:

§ 17.23 Specifications for painting and lighting antenna structures.

Unless otherwise specified by the Commission, each new or altered antenna structure must conform to the FAA's painting and lighting specifications set forth in the FAA's final determination of "no hazard" and the associated FAA study for that particular structure. For purposes of this part, any specifications, standards, and general requirements set forth by the FAA in the structure's determination of "no hazard" and the associated FAA study are mandatory. Additionally, each antenna structure must be painted and lighted in accordance with any painting and lighting requirements prescribed on the antenna structure's registration, or in accordance with any other specifications provided by the Commission.

13. A new Section 17.24 would be added to read as follows:

§ 17.24 Existing structures.

No change to painting or lighting criteria or relocation of airports shall at any time impose a new restriction upon any then existing or authorized antenna structure or structures.

14. Section 17.45 would be removed and reserved.

15. Section 17.48 would be revised to read as follows:

§ 17.48 Notification of extinguishment or improper functioning of lights.

The owner of any antenna structure that requires registration of the structure with the Commission and has been assigned lighting specifications referenced in this part shall report immediately to the Federal Aviation Administration, by means acceptable to the Federal Aviation Administration, any observed or otherwise known extinguishment or improper functioning of any top steady burning light or any flashing obstruction light, regardless of its position on the antenna structure, not corrected within 30 minutes. If the lights cannot be repaired within 15 days, the owner shall notify the FAA to extend the outage date and report a return to service date. The owner will repeat this process every 15 days until the lights are repaired. Such reports shall set forth the condition of the light or lights, the circumstances which caused the failure, the probable date for restoration of service, the FCC Antenna Structure Registration Number, the height of the structure (AGL and AMSL if known) and the name, title, address, and telephone number of the person making the report. Further notification to the Federal Aviation Administration by means

acceptable to the FAA shall be given immediately upon resumption of normal operation of the light or lights.

* * * * *

16. Section 17.49 would be amended by revising its introductory language to read as follows:

§ 17.49 Recording of antenna structure light inspections in the owner record.

The owner of each antenna structure which is registered with the Commission and has been assigned lighting specifications referenced in this part must maintain a record of any observed or otherwise known extinguishment or improper functioning of a structure light. This record shall be retained for a period of two years and provided to the FCC or its agents upon request. The record shall include the following information for each such event:

* * * * *

17. Section 17.51 would be removed and reserved.

18. Section 17.56 would be removed and reserved.

19. Section 17.58 would be removed and reserved.

APPENDIX B

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹¹⁷ the Commission has prepared the present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities that might result from this Notice. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice provided above. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.¹¹⁸ In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.¹¹⁹

A. Need for, and Objectives of, the Proposed Rules

2. Section 303(q) of the Communications Act vests in the Commission the authority to require painting and/or lighting of radio towers that may constitute a hazard to air navigation. Part 17 of the Commission's rules sets forth procedures for identifying those antenna structures that might affect air navigation, consistent with recommendations made by the Federal Aviation Administration (FAA), and for registering such structures with the Commission. The Commission requires owners of antenna structures to register with the Commission those structures that meet the registration criteria and to exercise primary responsibility for the prescribed painting and lighting. The proposed rules seek to achieve the best framework to continue to fulfill the Commission's statutory responsibility to require antenna structure owners, registrants and Commission licensees to do whatever is necessary to prevent antenna structures from being hazards or menaces to air navigation.

3. The Commission proposes to amend subsection 17.4(a) and Sections 17.21, 17.22 (redesignated as subsection 17.21(c)), and 17.23 and to delete subsection 17.17(a) of the Commission's rules regarding antenna structure registration and painting and lighting specifications. The Commission also proposes conforming edits to Sections 1.61(a)(5) and 17.1(b). These proposed changes are intended to clarify the relationship between the Commission's rules and procedures and those of the FAA and to ensure continued consistency in those rules and procedures. The Commission also asks whether to amend Section 17.17(b) (redesignated as Section 17.24) by providing that a revised FAA Circular does not impose new obligations on already-approved antenna structures.

4. In order to clarify the obligations of antenna structure owners and to conform the Commission's regulations to Commission and FAA practice, the Commission proposes adding new subsections to Section 17.4 specifying that any change in height of one foot or greater, any change in coordinates of one second or greater, or any change in marking and lighting specifications requires prior approval from the FAA and the Commission. The Commission also proposes to consider whether to specify accuracy standards or survey methods in order to ensure consistency of data.

5. The Commission proposes to delete Sections 17.7 and 17.14 of the Commission's rules, which are restatements of FAA rules, and to substitute cross-references to relevant FAA rules in Section 17.4 of the Commission's rules. This change could reduce the risk of confusion in the event the FAA

¹¹⁷ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-12, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, 110 Stat. 857 (1996).

¹¹⁸ See 5 U.S.C. § 603(a).

¹¹⁹ *Id.*

were to change its criteria.

6. The Commission proposes to amend its rules governing inspection and maintenance of lighting by: 1) amending Section 17.47 to eliminate or reduce requirements to perform inspections of lighting and light monitoring systems; 2) amending Section 17.48(a) to require antenna structure owners to provide continuously active notice to the FAA of lighting outages; and 3) deleting vague references to timely repair timeframes in Sections 17.48(b) and 17.56(a). The Commission proposes to consider whether to eliminate Section 17.47 in its entirety or to retain modified inspection requirements and whether to substitute more specific repair time limitations. These proposals are intended to relieve unnecessary burdens and reduce confusion while ensuring that aircraft navigation safety is best protected.

7. The Commission proposes to delete Sections 17.45, 17.51, and 17.56(b), which set forth specific requirements for exhibiting and maintaining lights, because they are unnecessary and may create ambiguity in cases of conflict with FAA specifications. This change could reduce the risk of confusion.

8. Section 17.49 requires antenna structure owners to maintain a record of observed or otherwise known extinguishments or improper functioning of structure lights. The Commission proposes to add a requirement to maintain such records for two years and provide the records to the Commission upon request in order to balance the Commission's need to determine the compliance record against the burden of record retention on antenna structure owners.

9. The Commission is considering a proposal to amend Section 17.50 to require use of the FAA's 'In Service Aviation Orange Tolerance Chart' to determine whether a structure needs to be cleaned or repainted and to specify how the chart is to be used. These changes may provide more objective standards for gauging visibility.

10. The Commission proposes to amend Section 17.2(a) of the Commission's rules to clarify both when a structure becomes, and when a structure ceases to be, an "antenna structure" under our rules. The Commission also proposes to amend Section 17.2(c) of the Commission's rules to clarify that the obligations of an "antenna structure owner" fall only on the owner of the underlying structure, and not on tenants, thus promoting clarity for all parties.

11. The Commission also proposes to consider whether the rules concerning antenna structures should be enforced against voluntarily registered structures, whether owners of antenna structures that do not require registration should be prohibited from registering their towers, and whether antenna structure owners who have voluntarily registered structures should be required to withdraw their registrations from the Commission's antenna structure database. Such action could reduce confusion by clarifying the regulatory status of these structures.

12. The Commission proposes to modify Section 17.4(g) to require that antenna structure owners display the Antenna Structure Registration (ASR) number so that it would be visible to a member of the general public who reaches the closest publicly accessible location near each point of access to the antenna structure. The Commission further proposes to delete the requirement that the ASR number be posted near the base of the antenna structure. The Commission tentatively concludes that amending the rule in this manner would clarify the obligations of antenna structure owners, promote timely remediation when lighting is observed to be malfunctioning or extinguished, and eliminate unnecessary postings.

13. Section 17.4(f) requires that antenna structure owners immediately provide copies of FCC Form 854R (antenna structure registration) to each tenant licensee and permittee. Sections 17.4(e) and 17.6(c) impose a similar requirement on the first licensee in cases where the antenna structure owner is unable to file Form 854 because it is subject to a denial of Federal benefits under the Anti-Drug Abuse Act of 1988. The Commission proposes to amend these rules to allow the alternative of providing a link

to the Commission's antenna structure registration website via paper or electronic mail.

14. The Commission proposes to delete Section 17.58, which was intended to promote compliance with procedures that are now obsolete. This change would streamline the antenna structure registration process.

B. Legal Basis

15. The legal basis for any action that may be taken pursuant to the Notice is contained in Sections 4(i), 4(j), 11, and 303(q) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i)-(j), 161, 303(q).

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules May Apply

16. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by proposed rules.¹²⁰ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."¹²¹ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.¹²² A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration ("SBA").¹²³

17. The Notice proposes rule changes that would impose requirements on a large number of entities relating to the registration of and maintenance of painting and lighting on antenna structures. Due to the number and diversity of owners of antenna structures and other responsible parties, including small entities that are Commission licensees as well as non-licensee tower companies, we classify and quantify them in the remainder of this section.

18. Cellular Licensees. The SBA has developed a small business size standard for small businesses in the category "Wireless Telecommunications Carriers (except satellite)."¹²⁴ Under that SBA category, a business is small if it has 1,500 or fewer employees.¹²⁵ The census category of "Cellular and Other Wireless Telecommunications" is no longer used and has been superseded by the larger category "Wireless Telecommunications Carriers (except satellite)". However, since currently available data was gathered when "Cellular and Other Wireless Telecommunications" was the relevant category, earlier Census Bureau data collected under the category of "Cellular and Other Wireless Telecommunications" will be used here. Census Bureau data for 2002 show that there were 1,397 firms in this category that

¹²⁰ 5 U.S.C. § 604(a)(3).

¹²¹ 5 U.S.C. § 601(6).

¹²² 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

¹²³ 15 U.S.C. § 632.

¹²⁴ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517210.

¹²⁵ *Id.*

operated for the entire year.¹²⁶ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.¹²⁷ Thus, under this category and size standard, the majority of firms can be considered small.

19. *Broadband Personal Communications Service.* The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.¹²⁸ For Block F, an additional small business size standard for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹²⁹ These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.¹³⁰ No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the C Block auctions. A total of 93 “small” and “very small” business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.¹³¹ On March 23, 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.¹³² On January 26, 2001, the Commission completed the auction of 422 C and F PCS licenses in Auction 35.¹³³ Of the 35 winning bidders in this auction, 29 qualified as “small” or “very small” businesses. Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant.

20. *Narrowband Personal Communications Service.* The Commission held an auction for Narrowband Personal Communications Service (PCS) licenses that commenced on July 25, 1994, and closed on July 29, 1994. A second commenced on October 26, 1994 and closed on November 8, 1994. For purposes of the first two Narrowband PCS auctions, “small businesses” were entities with average gross revenues for the prior three calendar years of \$40 million or less.¹³⁴ Through these auctions, the Commission awarded a total of forty-one licenses, 11 of which were obtained by four small businesses.¹³⁵

¹²⁶ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517212 (issued Nov. 2005).

¹²⁷ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

¹²⁸ See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7850-7852 ¶¶ 57-60 (1996); see also 47 C.F.R. § 24.720(b).

¹²⁹ See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7852 ¶ 60.

¹³⁰ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

¹³¹ FCC News, “Broadband PCS, D, E and F Block Auction Closes,” No. 71744 (rel. January 14, 1997).

¹³² See “C, D, E, and F Block Broadband PCS Auction Closes,” *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

¹³³ See “C and F Block Broadband PCS Auction Closes; Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 2339 (2001).

¹³⁴ Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS, *Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 175, 196 ¶ 46 (1994).

¹³⁵ See “Announcing the High Bidders in the Auction of Ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674,” *Public Notice*, PNWL 94-004 (rel. Aug. 2, 1994); “Announcing the High Bidders in the
(continued....)

To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.¹³⁶ A “small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million.¹³⁷ A “very small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.¹³⁸ The SBA has approved these small business size standards.¹³⁹ A third auction commenced on October 3, 2001 and closed on October 16, 2001. Here, five bidders won 317 (MTA and nationwide) licenses.¹⁴⁰ Three of these claimed status as a small or very small entity and won 311 licenses.

21. *Specialized Mobile Radio*. The Commission awards “small entity” bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years.¹⁴¹ The Commission awards “very small entity” bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.¹⁴² The SBA has approved these small business size standards for the 900 MHz Service.¹⁴³ The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.¹⁴⁴ A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 licenses. One bidder claiming small business status won five licenses.¹⁴⁵

22. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders that won

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Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787,” *Public Notice*, PNWL 94-27 (rel. Nov. 9, 1994).

¹³⁶ Amendment of the Commission’s Rules to Establish New Personal Communications Services, *Narrowband PCS, Second Report and Order and Second Further Notice of Proposed Rule Making*, 15 FCC Rcd 10456, 10476 ¶ 40 (2000).

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

¹⁴⁰ See “Narrowband PCS Auction Closes,” *Public Notice*, 16 FCC Rcd 18663 (WTB 2001).

¹⁴¹ 47 C.F.R. § 90.814(b)(1).

¹⁴² *Id.*

¹⁴³ See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

¹⁴⁴ See “Correction to Public Notice DA 96-586 ‘FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas,’” *Public Notice*, 18 FCC Rcd 18367 (WTB 1996).

¹⁴⁵ See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were sold. Of the 22 winning bidders, 19 claimed “small business” status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

23. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$3 million or \$15 million (the special small business size standards), or have no more than 1,500 employees (the generic SBA standard for wireless entities, discussed, *supra*). One firm has over \$15 million in revenues. The Commission assumes, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities.

24. Advanced Wireless Services. The *Report and Order* adopting service rules for Advanced Wireless Services (AWS) in the 1710-1755 and 2110-2155 MHz bands¹⁴⁶ affected applicants who wish to provide service in the 1710-1755 MHz and 2110-2155 MHz bands. As discussed in the *AWS-1 Service Rules Order*, we do not know precisely the type of service that a licensee in these bands might seek to provide.¹⁴⁷ Nonetheless, we anticipate that the services that will be deployed in these bands may have capital requirements comparable to those in the broadband Personal Communications Service (PCS), and that the licensees in these bands will be presented with issues and costs similar to those presented to broadband PCS licensees. Further, at the time the broadband PCS service was established, it was similarly anticipated that it would facilitate the introduction of a new generation of service. Therefore, the *AWS-1 Service Rules Order* adopted the same small business size standards that the Commission adopted for the broadband PCS service. In particular, the Order defined a “small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a “very small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million. The Order also provided small businesses with a bidding credit of 15 percent and very small businesses with a bidding credit of 25 percent. In the auction held August 9 through September 18, 2006, 55% of the winning bidders were small businesses (57 of 104).¹⁴⁸

25. Rural Radiotelephone Service. The Commission uses the SBA small business size standard applicable to Wireless Telecommunication Carriers (except satellite), *i.e.*, an entity employing no more than 1,500 persons.¹⁴⁹ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

26. Wireless Communications Services. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses in the 2305-2320 MHz and 2345-2360 MHz bands. The

¹⁴⁶ Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, 18 FCC Rcd 25162 (2003) (*AWS-1 Service Rules Order*).

¹⁴⁷ See *id.* at ¶ 144.

¹⁴⁸ See News Release “Statements of FCC Chairman and Commissioners Before the Committee on Energy and Commerce, Subcommittee on Telecommunications and the Internet, U.S. House of Representatives”, Chairman Martin’s Written Statement, Exhibit 3, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-281580A2.pdf, (4/15/2008).

¹⁴⁹ 13 C.F.R. § 121.201, NAICS code 517210.

Commission defined “small business” for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million or less for each of the three preceding years, and a “very small business” as an entity with average gross revenues of \$15 million or less for each of the three preceding years.¹⁵⁰ The SBA has approved these definitions.¹⁵¹ The Commission auctioned geographic area licenses in the WCS service. In the auction, which commenced on April 15, 1997 and closed on April 25, 1997, there were seven bidders that won 31 licenses that qualified as very small business entities, and one bidder that won one license that qualified as a small business entity.

27. 220 MHz Radio Service – Phase I Licensees. The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz Band. The Commission has not developed a definition of small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, the Commission applies the small business size standard under the SBA rules applicable to “Cellular and Other Wireless Telecommunications” companies. Note that the census category of “Cellular and Other Wireless Telecommunications” is no longer used and has been superseded by the larger category “Wireless Telecommunications Carriers (except satellite)”. This category provides that a small business is a wireless company employing no more than 1,500 persons.¹⁵² However, since currently available data was gathered when “Cellular and Other Wireless Telecommunications” was the relevant category, earlier Census Bureau data collected under the category of “Cellular and Other Wireless Telecommunications” will be used here. Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.¹⁵³ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.¹⁵⁴ Therefore, the majority of firms can be considered small.

28. 220 MHz Radio Service – Phase II Licensees. The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is subject to spectrum auctions. In the *220 MHz Third Report and Order*, the Commission adopted a small business size standard for defining “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹⁵⁵ This small business standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.¹⁵⁶ A “very small business” is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years.¹⁵⁷ The SBA has approved these small size standards.¹⁵⁸ Auctions of Phase II

¹⁵⁰ Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service (WCS), *Report and Order*, 12 FCC Rcd 10785, 10879 ¶ 194 (1997).

¹⁵¹ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

¹⁵² 13 C.F.R. § 121.201, NAICS code 517210.

¹⁵³ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization,” Table 5, NAICS code 517212 (issued Nov. 2005).

¹⁵⁴ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

¹⁵⁵ Amendment of Part 90 of the Commission’s Rules to Provide For the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Third Report and Order*, 12 FCC Rcd 10943, 11068-70 ¶¶ 291-295 (1997).

¹⁵⁶ *Id.* at 11068 ¶ 291.

¹⁵⁷ *Id.*

licenses commenced on September 15, 1998, and closed on October 22, 1998.¹⁵⁹ In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.¹⁶⁰ Thirty-nine small businesses won 373 licenses in the first 220 MHz auction. A second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.¹⁶¹ A third auction included four licenses: 2 BEA licenses and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these licenses.¹⁶²

29. 700 MHz Guard Bands Licenses. In the *700 MHz Guard Bands Order*, the Commission adopted size standards for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹⁶³ A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.¹⁶⁴ Additionally, a “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.¹⁶⁵ SBA approval of these definitions is not required.¹⁶⁶ An auction of 52 Major Economic Area (MEA) licenses for each of two spectrum blocks commenced on September 6, 2000, and closed on September 21, 2000.¹⁶⁷ Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of remaining 700 MHz Guard Bands licenses commenced on February 13, 2001, and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.¹⁶⁸ Subsequently, in the *700 MHz Second Report and Order*, the Commission reorganized the licenses pursuant to an agreement among most of the licensees, resulting in a spectral relocation of the first set of paired spectrum block licenses, and an elimination of the second set of paired spectrum block licenses

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¹⁵⁸ See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

¹⁵⁹ See generally “220 MHz Service Auction Closes,” *Public Notice*, 14 FCC Rcd 605 (WTB 1998).

¹⁶⁰ See “FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made,” *Public Notice*, 14 FCC Rcd 1085 (WTB 1999).

¹⁶¹ See “Phase II 220 MHz Service Spectrum Auction Closes,” *Public Notice*, 14 FCC Rcd 11218 (WTB 1999).

¹⁶² See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

¹⁶³ See Service Rules for the 746-764 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, *Second Report and Order*, 15 FCC Rcd 5299 (2000).

¹⁶⁴ *Id.* at 5343 ¶ 108.

¹⁶⁵ *Id.*

¹⁶⁶ *Id.* At 5343 ¶ 108 n.246 (for the 746-764 MHz and 776-704 MHz bands, the Commission is exempt from 15 U.S.C. § 632, which requires Federal agencies to obtain Small Business Administration approval before adopting small business size standards).

¹⁶⁷ See “700 MHz Guard Bands Auction Closes: Winning Bidders Announced,” *Public Notice*, 15 FCC Rcd 18026 (2000).

¹⁶⁸ See “700 MHz Guard Bands Auctions Closes: Winning Bidders Announced,” *Public Notice*, 16 FCC Rcd 4590 (WTB 2001).

(many of which were already vacant, reclaimed by the Commission from Nextel).¹⁶⁹ A single licensee that did not participate in the agreement was grandfathered in the initial spectral location for its two licenses in the second set of paired spectrum blocks.¹⁷⁰ Accordingly, at this time there are 54 licenses in the 700 MHz Guard Bands.

30. 700 MHz Band Commercial Licenses. There is 80 megahertz of non-Guard Band spectrum in the 700 MHz Band that is designated for commercial use: 698-757, 758-763, 776-787, and 788-793 MHz Bands. With one exception, the Commission adopted criteria for defining two groups of small businesses for purposes of determining their eligibility for bidding credits at auction. These two categories are: (1) “small business,” which is defined as an entity with attributed average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years; and (2) “very small business,” which is defined as an entity with attributed average annual gross revenues that do not exceed \$15 million for the preceding three years.¹⁷¹ In Block C of the Lower 700 MHz Band (710-716 MHz and 740-746 MHz), which was licensed on the basis of 734 Cellular Market Areas, the Commission adopted a third criterion for determining eligibility for bidding credits: an “entrepreneur,” which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.¹⁷² The SBA has approved these small size standards.¹⁷³

31. An auction of 740 licenses for Blocks C (710-716 MHz and 740-746 MHz) and D (716-722 MHz) of the Lower 700 MHz Band commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business, or entrepreneur status and won a total of 329 licenses.¹⁷⁴ A second auction commenced on May 28, 2003, and closed on June 13, 2003, and included 256 licenses: five EAG licenses and 251 CMA licenses.¹⁷⁵ Seventeen winning bidders claimed small or very small business status and won 60 licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.¹⁷⁶

32. The remaining 62 megahertz of commercial spectrum was auctioned on January 24 through March 18, 2008. As explained above, bidding credits for all of these licenses were available to “small businesses” and “very small businesses.” Auction 73 concluded with 1090 provisionally winning bids covering 1091 licenses and totaling \$19,592,420,000. The provisionally winning bids for the A, B, C, and E Block licenses exceeded the aggregate reserve prices for those blocks. The provisionally winning bid for the D Block license, however, did not meet the applicable reserve price and thus did not become a

¹⁶⁹ See In the Matter of Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket 06-150, *Second Report and Order*, 22 FCC Rcd 15289, 15339-15344 ¶¶ 118-134 (2007) (*700 MHz Second Report and Order*).

¹⁷⁰ *Id.*

¹⁷¹ See Auction of 700 MHz Band Licenses Scheduled for January 24, 2008, AU Docket No. 07-157, *Notice and Filing Requirements, Minimum Opening Bids, Reserve Prices, Upfront Payments, and Other Procedures for Auctions 73 and 76*, DA 07-4171 at ¶ 70 (WTB rel. Oct. 5, 2007); Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Report and Order*, 17 FCC Rcd 1022, 1087-88 (2002).

¹⁷² *Id.* at 1088.

¹⁷³ See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

¹⁷⁴ See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 17 FCC Rcd 17272 (WTB 2002).

¹⁷⁵ See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 18 FCC Rcd 11873 (WTB 2003).

¹⁷⁶ *Id.*

winning bid. Approximately 55 small businesses had winning bids.¹⁷⁷ Currently, the 10 remaining megahertz associated with the D block have not yet been assigned.¹⁷⁸

33. *Private and Common Carrier Paging.* The SBA had developed a small business size standard for wireless firms within the broad economic census category of "Paging"¹⁷⁹. However, the census category "Paging" is no longer used and has been superseded by the larger category "Wireless Telecommunications Carriers (except satellite)."¹⁸⁰ Under that SBA category, a business is small if it has 1,500 or fewer employees.¹⁸¹ However, since currently available data was gathered when "Paging" was the relevant category, earlier Census Bureau data collected under the category of "Paging" will be used here. Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.¹⁸² Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.¹⁸³ Thus, under this category, the majority of firms can be considered small.

34. In the *Paging Third Report and Order*, the Commission developed a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹⁸⁴ A "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.¹⁸⁵ The SBA has approved these small business size standards.¹⁸⁶ An auction of Metropolitan Economic Area licenses commenced on February 24, 2000, and closed on March 2, 2000.¹⁸⁷ Of the 2,499 licenses auctioned, 985 were sold.¹⁸⁸ Fifty-seven companies claiming small business status won 440 licenses.¹⁸⁹ An auction of MEA and Economic Area (EA) licenses commenced on October 30, 2001, and closed on December 5, 2001. Of the 15,514 licenses auctioned, 5,323 were sold.¹⁹⁰ 132

¹⁷⁷ See "Auction of 700 MHz Band Licenses Closes," *Public Notice*, 23 FCC Rcd 4572 (WTB 2008).

¹⁷⁸ See [fcc.gov website at http://wireless.fcc.gov/auctions/default.htm?job=auction_summary&id=73](http://wireless.fcc.gov/auctions/default.htm?job=auction_summary&id=73).

¹⁷⁹ 13 C.F.R. § 121.201, NAICS code 517211.

¹⁸⁰ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517210.

¹⁸¹ *Id.*

¹⁸² U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517211 (issued Nov. 2005).

¹⁸³ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

¹⁸⁴ *Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service*, PR Docket No. 89-552, Third Report and Order and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 10943, 11068-70, paras. 291-295, (1997).

¹⁸⁵ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from A. Alvarez, Administrator, SBA (Dec. 2, 1998) (SBA Dec. 2, 1998 Letter).

¹⁸⁶ *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030, paras. 98-107 (1999).

¹⁸⁷ *Id.* at 10085, para. 98.

¹⁸⁸ See "929 and 931 MHz Paging Auction Closes," *Public Notice*, 15 FCC Rcd 4858 (WTB 2000).

¹⁸⁹ See *id.*

¹⁹⁰ See "Lower and Upper Paging Band Auction Closes," *Public Notice*, 16 FCC Rcd 21821 (WTB 2002).

companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs, commenced on May 13, 2003, and closed on May 28, 2003. Seventy-seven bidders claiming small or very small business status won 2,093 licenses.¹⁹¹ Currently, there are approximately 24,000 Private Paging site-specific licenses and 74,000 Common Carrier Paging licenses. According to the Commission's *Trends in Telephone Service*, 375 such carriers reported that they were engaged in the provision of either paging or "messaging service."¹⁹² Of these, the Commission estimates that 370 are small, under the SBA-approved small business size standard.¹⁹³ The Commission estimates that the majority of private and common carrier paging providers would qualify as small entities under the SBA definition.

35. Air-Ground Radiotelephone Service. The Commission uses the SBA definition of small business size applicable to Wireless Telecommunications Carriers (except satellite), *i.e.*, an entity employing no more than 1,500 persons.¹⁹⁴ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard.

36. Aviation and Marine Radio Services. Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers (except satellite), which is 1,500 or fewer employees.¹⁹⁵ Most applicants for recreational licenses are individuals. Approximately 47,750 ship station licensees, who hold approximately 56,250 ship station licenses, and approximately 27,700 aircraft station licensees, who hold approximately 32,000 aircraft station licenses, operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 75,450 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a "small" business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million. In addition, a "very small" business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million.¹⁹⁶ There are approximately 6,100 Marine Coast Service licenses, held by approximately 3,600 licensees, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

37. Fixed Microwave Services. Fixed microwave services include common carrier,¹⁹⁷ private

¹⁹¹ See "Lower and Upper Paging Bands Auction Closes," *Public Notice*, 18 FCC Rcd 11154 (WTB 2003).

¹⁹² See *Trends in Telephone Service*, Industry Analysis Division, Wireline Competition Bureau, Table 5.3 (Number of Telecommunications Service Providers by Size of Business) (June 2005).

¹⁹³ 13 C.F.R. § 121.201, NAICS code 517210.

¹⁹⁴ *Id.*

¹⁹⁵ *Id.*

¹⁹⁶ *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 19853 (1998).

¹⁹⁷ See 47 C.F.R. §§ 101 *et seq.* (formerly, Part 21 of the Commission's Rules) for common carrier fixed microwave services (except Multipoint Distribution Service).

operational-fixed,¹⁹⁸ and broadcast auxiliary radio services.¹⁹⁹ At present, there are approximately 31,428 common carrier fixed licensees and 79,732 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for the category “Wireless Telecommunications Carriers (except satellite)”, which provides that a small business is a wireless company employing no more than 1,500 persons.²⁰⁰ The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus is unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA’s small business size standard. Consequently, the Commission estimates that there are up to 31,428 common carrier fixed licensees and up to 79,732 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies adopted herein. We note, however, that the common carrier microwave fixed licensee category includes some large entities.

38. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.²⁰¹ There is presently one licensee in this service. The Commission uses the SBA definition applicable to Wireless Telecommunications Carriers (except satellite), *i.e.*, an entity employing no more than 1,500 persons.²⁰² The Commission is unable to estimate at this time the number of licensees that would qualify as small entities under the SBA definition. The Commission assumes, for purposes of this analysis, that the licensee is a small entity, as that term is defined by the SBA.

39. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses – an entity that has average gross revenues of \$40 million or less in the three previous calendar years.²⁰³ An additional size standard for “very small business” is: an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.²⁰⁴ The SBA has approved these small business size standards.²⁰⁵ The auction of the 2,173 39 GHz licenses began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by the rules and policies adopted herein.

¹⁹⁸ Persons eligible under parts 80 and 90 of the Commission’s Rules can use Private Operational-Fixed Microwave services. See 47 C.F.R. Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee’s commercial, industrial, or safety operations.

¹⁹⁹ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission’s rules. See 47 C.F.R. Part 74. This service is available to licensees of broadcast stations and to broadcast and cable network entities. Broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile television pickups, which relay signals from a remote location back to the studio.

²⁰⁰ 13 C.F.R. § 121.201, NAICS code 517210.

²⁰¹ This service is governed by Subpart I of Part 22 of the Commission’s rules. See 47 C.F.R. §§ 22.1001-22.1037.

²⁰² 13 C.F.R. § 121.201, NAICS code 517210.

²⁰³ See *Amendment of the Commission’s Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, ET Docket No. 95-183, Report and Order, 63 Fed. Reg. 6079 (Feb. 6, 1998).

²⁰⁴ *Id.*

²⁰⁵ See Letter to Kathleen O’Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Feb. 4, 1998).

40. *Broadband Radio Service and Educational Broadband Service.* The Broadband Radio Service (“BRS”), formerly known as the Multipoint Distribution Service (“MDS”),²⁰⁶ and the Educational Broadband Service (“EBS”), formerly known as the Instructional Television Fixed Service (“ITFS”),²⁰⁷ use 2 GHz band frequencies to transmit video programming and provide broadband services to residential subscribers.²⁰⁸ These services, collectively referred to as “wireless cable,” were originally designed for the delivery of multichannel video programming, similar to that of traditional cable systems, but over the past several years licensees have focused their operations instead on providing two-way high-speed Internet access services.²⁰⁹ We estimate that the number of wireless cable subscribers is approximately 100,000, as of March 2005. The SBA small business size standard for the broad census category of Cable and Other Program Distribution, which consists of such entities generating \$13.5 million or less in annual receipts, appears applicable to MDS and ITFS.²¹⁰ Note that the census category of “Cable and Other Program Distribution” is no longer used and has been superseded by the larger category “Wireless Telecommunications Carriers (except satellite). This category provides that a small business is a wireless company employing no more than 1,500 persons.²¹¹ However, since currently available data was gathered when “Cable and Other Program Distribution” was the relevant category, earlier Census Bureau data collected under the category of “Cable and Other Program Distribution” will be used here. Other standards also apply, as described.

41. The Commission has defined small MDS (now BRS) entities in the context of Commission license auctions. In the 1996 MDS auction,²¹² the Commission defined a small business as an entity that had annual average gross revenues of less than \$40 million in the previous three calendar years.²¹³ This definition of a small entity in the context of MDS auctions has been approved by the SBA.²¹⁴ In the MDS auction, 67 bidders won 493 licenses. Of the 67 auction winners, 61 claimed status as a small business. At this time, the Commission estimates that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are hundreds of MDS licensees and wireless cable operators that did not receive their licenses as a result of the MDS auction and that fall under the former SBA small business size standard for Cable and Other

²⁰⁶ See 47 C.F.R. Part 21, subpart K; Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands; Part 1 of the Commission’s Rules - Further Competitive Bidding Procedures; Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service Amendment of Parts 21 and 74 to Engage in Fixed Two-Way Transmissions; Amendment of Parts 21 and 74 of the Commission’s Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico, 19 FCC Rcd 14165 (2004) (“*MDS/ITFS Order*”).

²⁰⁷ See 47 C.F.R. Part 74, subpart I; *MDS/ITFS Order*, 19 FCC Rcd 14165 (2004).

²⁰⁸ See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eleventh Annual Report*, 20 FCC Rcd 2507, 2565 ¶ 131 (2006) (“*2006 Cable Competition Report*”).

²⁰⁹ *Id.*

²¹⁰ 13 C.F.R. § 121.201, NAICS code 515210.

²¹¹ 13 C.F.R. § 121.201, NAICS code 517210.

²¹² MDS Auction No. 6 began on November 13, 1995, and closed on March 28, 1996. (67 bidders won 493 licenses.)

²¹³ 47 C.F.R. § 21.961(b)(1).

²¹⁴ See *ITFS Order*, 10 FCC Rcd at 9589.

Program Distribution.²¹⁵ Information available to us indicates that there are approximately 850 of these licensees and operators that do not generate revenue in excess of \$13.5 million annually. Therefore, we estimate that there are approximately 850 of these small entity MDS (or BRS) providers, as defined by the SBA and the Commission's auction rules.

42. Educational institutions are included in this analysis as small entities; however, the Commission has not created a specific small business size standard for ITFS (now EBS).²¹⁶ We estimate that there are currently 2,452 EBS licenses, held by 1,524 EBS licensees, and all but 100 of the licenses are held by educational institutions. Thus, we estimate that at least 1,424 EBS licensees are small entities.

43. *Local Multipoint Distribution Service.* Local Multipoint Distribution Service (LMDS) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.²¹⁷ The auction of the 986 Local Multipoint Distribution Service (LMDS) licenses began on February 18, 1998 and closed on March 25, 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.²¹⁸ An additional small business size standard for "very small business" was added as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.²¹⁹ The SBA has approved these small business size standards in the context of LMDS auctions.²²⁰ There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 winning bidders.

44. *218-219 MHz Service.* The first auction of 218-219 MHz (previously referred to as the Interactive and Video Data Service or IVDS) spectrum resulted in 178 entities winning licenses for 594 Metropolitan Statistical Areas ("MSAs").²²¹ Of the 594 licenses, 567 were won by 167 entities qualifying as small businesses. For that auction, the Commission defined a small business as an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.²²² In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we defined a small business as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not exceeding \$15 million for the preceding

²¹⁵ Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard for "Cable and Other Program Distribution" (annual receipts of \$13.5 million or less). See 13 C.F.R. § 121.201, NAICS code 515210.

²¹⁶ In addition, the term "small entity" under SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on EBS licensees.

²¹⁷ See *Local Multipoint Distribution Service*, Second Report and Order, 12 FCC Rcd 12545 (1997).

²¹⁸ *Id.*

²¹⁹ See *id.*

²²⁰ See Letter to Dan Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998).

²²¹ See "Interactive Video and Data Service (IVDS) Applications Accepted for Filing," Public Notice, 9 FCC Rcd 6227 (1994).

²²² ²²² *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 9 FCC Rcd 2330 (1994).59 Fed. Reg. 24947 (May 13, 1994).

three years.²²³ A very small business is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not exceeding \$3 million for the preceding three years.²²⁴ The SBA has approved of these definitions.²²⁵ A subsequent auction is not yet scheduled. Given the success of small businesses in the previous auction, and the prevalence of small businesses in the subscription television services and message communications industries, we assume for purposes of this analysis that in future auctions, many, and perhaps most, of the licenses may be awarded to small businesses.

45. 24 GHz – Incumbent Licensees. This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard was formerly that of “Cellular and Other Wireless Telecommunications” companies. Note that the census category of “Cellular and Other Wireless Telecommunications” is no longer used and has been superseded by the larger category “Wireless Telecommunications Carriers (except satellite).” This category provides that a small business is a wireless company employing no more than 1,500 persons.²²⁶ However, since currently available data was gathered when “Cellular and Other Wireless Telecommunications” was the relevant category, earlier Census Bureau data collected under the category of “Cellular and Other Wireless Telecommunications” will be used here. We believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent²²⁷ and TRW, Inc. It is our understanding that Teligent and its related companies have fewer than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

46. 24 GHz – Future Licensees. With respect to new applicants in the 24 GHz band, the small business size standard for “small business” is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of \$15 million.²²⁸ “Very small business” in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.²²⁹ The SBA has approved these small business size standards.²³⁰ These size standards will apply to the future auction, if held.

47. Private Land Mobile Radio. Private Land Mobile Radio (“PLMR”) systems serve an

²²³²²³ *Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 15 FCC Rcd 1497 (64 Fed. Reg. 59656 (Nov. 3, 1999)).

²²⁴ *Id.*²²⁴ *Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 64 Fed. Reg. 59656 (Nov. 3, 1999).

²²⁵ See Letter from Aida Alvarez, Administrator, SBA, to Daniel Phythyon, Chief, WTB, FCC (Jan. 6, 1998) (“Alvarez to Phythyon Letter 1998”).

²²⁶ 13 C.F.R. § 121.201, NAICS code 517210.

²²⁷ Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

²²⁸ *Amendments to Parts 1, 2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz*, Report and Order, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(2).

²²⁹ *Amendments to Parts 1, 2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz*, Report and Order, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(1).

²³⁰ See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Gary M. Jackson, Assistant Administrator, SBA (July 28, 2000).

essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories. The SBA has not developed a definition of small entity specifically applicable to PLMR licensees due to the vast array of PLMR users. Therefore, solely for purposes of citing to currently available data, we will use a superseded SBA definition applicable to Cellular and Other Wireless Telecommunications. Note that the census category of “Cellular and Other Wireless Telecommunications” is no longer used and has been superseded by the larger category “Wireless Telecommunications Carriers (except satellite).” This category provides that a small business is a wireless company employing no more than 1,500 persons.²³¹ However, since currently available data was gathered when “Cellular and Other Wireless Telecommunications” was the relevant category, earlier Census Bureau data collected under the category of “Cellular and Other Wireless Telecommunications” will be used here.

48. The Commission is unable at this time to estimate the number of small businesses which could be impacted by the rules. The Commission’s 1994 Annual Report on PLMRs²³² indicates that at the end of fiscal year 1994 there were 1,087,267 licensees operating 12,481,989 transmitters in the PLMR bands below 512 MHz. Because any entity engaged in a commercial activity is eligible to hold a PLMR license, the revised rules in this context could potentially impact every small business in the United States.

49. *Public Safety Radio Services.* Public Safety radio services include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services. There are a total of approximately 44,083 licensees within these services. Governmental entities²³³ as well as private businesses comprise the licensees for these services. All governmental entities with populations of less than 50,000 fall within the definition of a small entity.²³⁴

50. *Location and Monitoring Service (“LMS”).* Multilateration LMS systems use non-voice radio techniques to determine the location and status of mobile radio units. For purposes of auctioning LMS licenses, the Commission has defined “small business” as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not to exceed \$15 million.²³⁵ A “very small business” is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not to exceed \$3 million.²³⁶ These definitions have been approved by the SBA.²³⁷ An auction for LMS licenses commenced on February 23, 1999 and closed on March 5, 1999. Of the 528 licenses auctioned, 289 licenses were sold to four small businesses. We conclude that the number of LMS licensees affected by this *Report and Order* includes these four entities. We cannot accurately predict the number of remaining licenses that could be awarded to small entities in future LMS auctions. In addition, there are numerous site-by-site non-multilateration licensees, and the Commission does not know how many of these providers have annual revenues of no more than \$15 million. The Commission assumes, for purposes of this analysis, that all of

²³¹ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517210.

²³² Federal Communications Commission, 60th Annual Report, Fiscal Year 1994, at paragraph 116.

²³³ 47 C.F.R. § 1.1162.

²³⁴ 5 U.S.C. § 601(5).

²³⁵ Amendment of Part 90 of the Commission’s Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, *Second Report and Order*, 13 FCC Rcd 15182 ¶ 20 (1998); *see also* 47 C.F.R. § 90.1103.

²³⁶ *Id.*

²³⁷ *See* Letter to Letter to Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration (Feb. 22, 1999).

these licenses are held by small entities, as that small business size standard is established by the SBA.

51. *Multiple Address Systems.* Entities using Multiple Address Systems (MAS) spectrum, in general, fall into two categories: (1) those using the spectrum for profit-based uses, and (2) those using the spectrum for private internal uses. With respect to the first category, the Commission defines “small entity” for MAS licensees as an entity that has average gross revenues of less than \$15 million in the three previous calendar years.²³⁸ “Very small business” is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$3 million for the preceding three calendar years.²³⁹ The SBA has approved of these definitions.²⁴⁰ The majority of these entities will most likely be licensed in bands where the Commission has implemented a geographic area licensing approach that would require the use of competitive bidding procedures to resolve mutually exclusive applications. The Commission’s licensing database indicates that, as of April 16, 2010, there were a total of 11,653 site-based MAS station authorizations. Of these, 58 authorizations were associated with common carrier service. In addition, the Commission’s licensing database indicates that, as of April 16, 2010, there were a total of 3,330 EA market area MAS authorizations.

52. With respect to the second category, which consists of entities that use, or seek to use, MAS spectrum to accommodate their own internal communications needs, MAS serves an essential role in a range of industrial, safety, business, and land transportation activities. MAS radios are used by companies of all sizes, operating in virtually all U.S. business categories, and by all types of public safety entities. For the majority of private internal users, the definitions developed by the SBA would be more appropriate than the Commission’s definition. The applicable definition of small entity in this instance appears to be the “Wireless Telecommunications Carriers (except satellite)” definition under the SBA rules.²⁴¹ Under that SBA category, a business is small if it has 1,500 or fewer employees.²⁴² The Commission’s licensing database indicates that, as of April 16, 2010, of the 11,653 total MAS station authorizations, 10,773 authorizations were for private radio service.

53. *Television Broadcasting.* The proposed rules and policies apply to television broadcast licensees and potential licensees of television service. The SBA defines a television broadcast station as a small business if such station has no more than \$14 million in annual receipts.²⁴³ Business concerns included in this industry are those “primarily engaged in broadcasting images together with sound.”²⁴⁴

²³⁸ See Amendment of the Commission’s Rules Regarding Multiple Address Systems, *Report and Order*, 15 FCC Rcd 11956, 12008 ¶ 123 (2000).

²³⁹ *Id.*

²⁴⁰ See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated June 4, 1999.

²⁴¹ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517210.

²⁴² *Id.*

²⁴³ See 13 C.F.R. § 121.201, NAICS Code 515120.

²⁴⁴ *Id.* This category description continues, “These establishments operate television broadcasting studios and facilities for the programming and transmission of programs to the public. These establishments also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs to the public on a predetermined schedule. Programming may originate in their own studios, from an affiliated network, or from external sources.” Separate census categories pertain to businesses primarily engaged in producing programming. See Motion Picture and Video Production, NAICS code 512110; Motion Picture and Video Distribution, NAICS Code 512120; Teleproduction and Other Post-Production Services, NAICS Code 512191; and Other Motion Picture and Video Industries, NAICS Code 512199.

The Commission has estimated the number of licensed commercial television stations to be 1,392.²⁴⁵ According to Commission staff review of the BIA/Kelsey, MAPro Television Database (“BIA”) as of April 7, 2010, about 1,015 of an estimated 1,380 commercial television stations²⁴⁶ (or about 74 percent) have revenues of \$14 million or less and thus qualify as small entities under the SBA definition. The Commission has estimated the number of licensed non-commercial educational (NCE) television stations to be 390.²⁴⁷ We note, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations²⁴⁸ must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. The Commission does not compile and otherwise does not have access to information on the revenue of NCE stations that would permit it to determine how many such stations would qualify as small entities.

54. In addition, an element of the definition of “small business” is that the entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific television station is dominant in its field of operation. Accordingly, the estimates of small businesses to which rules may apply do not exclude any television station from the definition of a small business on this basis and are therefore over-inclusive to that extent. Also as noted, an additional element of the definition of “small business” is that the entity must be independently owned and operated. We note that it is difficult at times to assess these criteria in the context of media entities and our estimates of small businesses to which they apply may be over-inclusive to this extent.

55. *Class A TV, LPTV, and TV translator stations.* The rules and policies proposed in this Notice include licensees of Class A TV stations, low power television (LPTV) stations, and TV translator stations, as well as potential licensees in these television services. The same SBA definition that applies to television broadcast licensees would apply to these stations. The SBA defines a television broadcast station as a small business if such station has no more than \$14 million in annual receipts.²⁴⁹ Currently, there are approximately 537 licensed Class A stations, 2,386 licensed LPTV stations, and 4,359 licensed TV translators.²⁵⁰ Given the nature of these services, we will presume that all of these licensees qualify as small entities under the SBA definition. We note, however, that under the SBA’s definition, revenue of affiliates that are not LPTV stations should be aggregated with the LPTV station revenues in determining whether a concern is small. Our estimate may thus overstate the number of small entities since the revenue figure on which it is based does not include or aggregate revenues from non-LPTV affiliated companies. We do not have data on revenues of TV translator or TV booster stations, but virtually all of these entities are also likely to have revenues of less than \$14 million and thus may be categorized as small, except to the extent that revenues of affiliated non-translator or booster entities should be considered.

56. *Radio Broadcasting.* The proposed rules and policies could apply to radio broadcast licensees, and potential licensees of radio service. The SBA defines a radio broadcast station as a small

²⁴⁵ See News Release, “Broadcast Station Totals as of December 31, 2009,” 2010 WL 676084 (F.C.C.) (dated Feb. 26, 2010) (“*Broadcast Station Totals*”); also available at <http://www.fcc.gov/mb/>.

²⁴⁶ We recognize that this total differs slightly from that contained in *Broadcast Station Totals*, *supra* note 446; however, we are using BIA’s estimate for purposes of this revenue comparison.

²⁴⁷ See *Broadcast Station Totals*, *supra* note 239.

²⁴⁸ “[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has the power to control both.” 13 C.F.R. § 121.103(a)(1).

²⁴⁹ See 13 C.F.R. § 121.201, NAICS Code 515120.

²⁵⁰ See *Broadcast Station Totals*, *supra* note 239.

business if such station has no more than \$7 million in annual receipts.²⁵¹ Business concerns included in this industry are those primarily engaged in broadcasting aural programs by radio to the public.²⁵² According to Commission staff review of the BIA/Kelsey Master Access Radio Analyzer Database on April 7, 2010, about 10,900 of 11,200 commercial radio stations (or about 97 percent) have revenues of \$7 million or less and thus qualify as small entities under the SBA definition. We note, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations²⁵³ must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies.

57. In addition, an element of the definition of “small business” is that the entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific radio station is dominant in its field of operation. Accordingly, the estimates of small businesses to which rules may apply do not exclude any radio station from the definition of a small business on this basis and therefore may be over-inclusive to that extent. Also as noted, an additional element of the definition of “small business” is that the entity must be independently owned and operated. We note that it is difficult at times to assess these criteria in the context of media entities and our estimates of small businesses to which they apply may be over-inclusive to this extent.

58. *FM translator stations and low power FM stations.* The proposed rules and policies could affect licensees of FM translator and booster stations and low power FM (LPFM) stations, as well as potential licensees in these radio services. The same SBA definition that applies to radio broadcast licensees would apply to these stations. The SBA defines a radio broadcast station as a small business if such station has no more than \$7 million in annual receipts.²⁵⁴ Currently, there are approximately 6,155 licensed FM translator and booster stations and 864 licensed LPFM stations.²⁵⁵ Given the nature of these services, we will presume that all of these licensees qualify as small entities under the SBA definition.

59. *Cable Television Systems.* The proposed rules and policies could affect cable television systems. Cable television systems fall within the SBA standard for Wired Telecommunication Carriers, and in this category a business is small if it has 1500 or fewer employees.²⁵⁶ This category includes, among others, cable operators, direct broadcast satellite services, fixed-satellite services, home satellite dish services, multipoint distribution services, multichannel multipoint distribution service, Instructional Television Fixed Service, local multipoint distribution service, satellite master antenna television systems, and open video systems.²⁵⁷ Since currently available data was gathered when “Cable and Other Program Distribution” was the relevant category, earlier Census Bureau data collected under the category of “Cable and Other Program Distribution” will be used here. According to Census Bureau data, there are 1,311 total cable and other pay television service firms that operate throughout the year of which 1,180

²⁵¹ See 13 C.F.R. § 121.201, NAICS Code 515112.

²⁵² *Id.*

²⁵³ “[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has to power to control both.” 13 C.F.R. § 121.103(a)(1).

²⁵⁴ See 13 C.F.R. § 121.201, NAICS Code 515112.

²⁵⁵ See *News Release*, “Broadcast Station Totals as of December 31, 2009” (rel. Feb. 26, 2010) (http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296538A1.pdf269784A1.doc).

²⁵⁶ 13 C.F.R. § 121.201 (NAICS Code 517110). This NAICS Code applies to all services listed in this paragraph.

²⁵⁷ Those MVPDs relying primarily or exclusively on satellite transmission could also be considered to fall under the “Satellite Telecommunications” category. 13 C.F.R. § 121.201 (NAICS Code 517410).

have less than \$10 million in revenue.²⁵⁸ Consequently, the Commission estimates that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein. We address below each service individually to provide a more precise estimate of small entities.

60. *Cable System Operators (Rate Regulation Standard)*. The Commission has developed its own small business size standards for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.²⁵⁹ As of 2008, out of 814²⁶⁰ cable operators all but 10, that is 804, qualify as small cable companies under this standard.²⁶¹ In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.²⁶² Current Commission records show 6000 cable systems. Of these 726 have 20,000 subscribers or more, based on the same records. We estimate that there are 5,000 small systems based upon this standard.

61. *Cable System Operators (Telecom Act Standard)*. The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."²⁶³ There are approximately 63.7 million cable subscribers in the United States today.²⁶⁴ Accordingly, an operator serving fewer than 637,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.²⁶⁵ Based on available data, we find that the number of cable operators serving 637,000 subscribers or less is also 804.²⁶⁶ We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.²⁶⁷ Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250,000,000, we are unable at

²⁵⁸ Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1997 Economic Census, Subject Series - Establishment and Firm Size, Information Sector 51, Table 4 at 50 (2000). The amount of \$10 million was used to estimate the number of small business firms because the relevant Census categories stopped at \$9,999,999 and began at \$10,000,000. No category for \$1412.5 million existed. Thus, the number is as accurate as it is possible to calculate with the available information.

²⁵⁹ 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of \$100 million or less. See Implementation of Sections of the 1992 Cable Act: Rate Regulation, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 (1995).

²⁶⁰ Cable MSO Ownership, A Geographical Analysis, 2009 Edition, 14-31, SNL Kagan (June 2009).

²⁶¹ *Id.* at 12.

²⁶² 47 C.F.R. § 76.901(c).

²⁶³ 47 U.S.C. § 543(m)(2); see 47 C.F.R. § 76.901(f) & nn. 1-3.).

²⁶⁴ See Cable TV Investor: Deals & Finance, No. 655, SNL Kagan, March 31, 2009, at 6.

²⁶⁵ 47 C.F.R. § 76.901(f); see Public Notice, FCC Announces New Subscriber Count for the Definition of Small Cable Operator, DA 01-158 (Cable Services Bureau, Jan. 24, 2001).

²⁶⁶ Cable MSO Ownership at 12.

²⁶⁷ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission's rules. See 47 C.F.R. § 76.901(f).

this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

62. *Satellite Telecommunications.* The category of Satellite Telecommunications “comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.”²⁶⁸ The category has a small business size standard of \$15 million or less in average annual receipts, under SBA rules.²⁶⁹ For this category, Census Bureau data for 2002 show that there were a total of 371 firms that operated for the entire year.²⁷⁰ Of this total, 307 firms had annual receipts of under \$10 million, and 26 firms had receipts of \$10 million to \$24,999,999.²⁷¹ Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

63. *All Other Telecommunications.* Satellite-related businesses within this category include “establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.”²⁷² For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.²⁷³ Of this total, 303 firms had annual receipts of under \$10 million and 15 firms had annual receipts of \$10 million to \$24,999,999.²⁷⁴ Consequently, we estimate that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

64. *Non-Licensee Tower Owners.* The Commission’s rules require that any entity proposing to construct an antenna structure over 200 feet or within the glide slope of an airport must register the antenna structure with the Commission on FCC Form 854.²⁷⁵ Thus, non-licensee tower owners may be subject to any new or additional requirements adopted in this proceeding. As of April 14, 2010, there were 103,444 registration records in a ‘Constructed’ status and 13,291 registration records in a ‘Granted, Not Constructed’ status in the Antenna Structure Registration (ASR) database. This includes both towers registered to licensees and towers registered to non-licensee tower owners. The Commission does not keep information from which we can easily determine how many of these towers are registered to non-licensees or how many non-licensees have registered towers.²⁷⁶ In addition, the Commission does not

²⁶⁸ U.S. Census Bureau, 2007 NAICS Definitions, “517410 Satellite Telecommunications”; <http://www.census.gov/naics/2007/def/ND517410.HTM>.

²⁶⁹ 13 C.F.R. § 121.201, NAICS code 517410.

²⁷⁰ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 517410 (issued Nov. 2005).

²⁷¹ *Id.* An additional 38 firms had annual receipts of \$25 million or more.

²⁷² U.S. Census Bureau, 2007 NAICS Definitions, “517919 All Other Telecommunications”; <http://www.census.gov/naics/2007/def/ND517919.HTM#N517919>.

²⁷³ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size Including Legal Form of Organization),” Table 4, NAICS code 517910 (issued Nov. 2005).

²⁷⁴ *Id.* An additional 14 firms had annual receipts of \$25 million or more.

²⁷⁵ 47 C.F.R. §§ 17.4(a), 17.7(a).

²⁷⁶ We note, however, that approximately 13,000 towers are registered to 10 cellular carriers with 1,000 or more employees.

keep data on businesses with annual revenue over \$25 million. Moreover, the SBA has not developed a size standard for small businesses in the category “Tower Owners.” Therefore, we are unable to estimate the number of non-licensee tower owners that are small entities. However, because these regulations impact tower owners, we are choosing a category related to our jurisdiction because of the nexus between our regulatory function and telecommunications with respect to towers. We will assume that nearly all non-licensee tower companies are small businesses under the SBA’s definition for “All Other Telecommunications”.²⁷⁷

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

65. This Notice proposes to amend Section 17.4(g) by requiring that the Antenna Structure Registration Number be displayed so that it is conspicuously visible and legible from every point of ingress/egress to the publicly accessible area nearest the base of the antenna structure, instead of only near the base of the structure as before. If Section 17.4(g) is amended, the owner of the structure would have to display the Antenna Structure Registration Number so that it is conspicuously visible and legible from potentially multiple locations near the base of the antenna structure instead of only at one location.

66. The Notice proposes to amend Section 17.48 by requiring antenna structure owners to provide continuously active notice to the FAA of lighting outages to allow the FAA to timely maintain Notices to Airmen (NOTAMs) or issue new NOTAMs, as necessary. Specifically, if the lights cannot be repaired within 15 days, the owner shall notify the FAA to extend the outage date and report a return to service date. The owner will repeat this process every 15 days until the lights are repaired. If the amendment to Section 17.48 is adopted, the owner of the structure would have to provide continuously active notice to the FAA of lighting outages, instead of the one time notice currently required.

67. Although Section 17.49 of the rules requires antenna structure owners to maintain a record of observed or otherwise known extinguishments or improper functioning of structure lights, it does not currently specify how long the record should be kept or what is to be done with it. The Notice proposes that the record be kept for two years and that it be provided to the Commission upon request. If adopted, antenna structure owners would be required to keep their records for two years and provide them to the Commission upon request.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

68. The Commission proposes to amend subsection 17.4(a) and Sections 17.21, 17.22 (redesignated as subsection 17.21(c)), and 17.23 and delete subsection 17.17(a) of the Commission's rules regarding antenna structure registration and painting and lighting specifications. The Commission also proposes conforming edits to Sections 1.61(a)(5) and 17.1(b). These proposed changes are intended both to promote aircraft navigation safety and also to reduce regulatory burdens on small entities by clarifying the relationship between the Commission's rules and procedures and those of the FAA and ensuring continued consistency in those rules and procedures. The Commission asks commenters to suggest alternatives that may further reduce the impact on small entities while achieving the above intended goals. The Commission specifically seeks comment on whether to further reduce regulatory burdens on small entities by amending Section 17.17(b) (redesignated as Section 17.24) to provide that a revised FAA Circular does not impose new obligations on already-approved antenna structures. The Commission seeks comment on whether such deregulatory action would unduly limit the Commission’s flexibility and

²⁷⁷ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517919. Under this category, a business is small if it has 1,500 or fewer employees.

whether it would afford appropriate deference to the FAA's expertise and how possible alternatives could further lessen the burden on small businesses while achieving these goals.

69. In order to clarify the obligations of antenna structure owners and conform the Commission's regulations to Commission and FAA practice, the Commission proposes adding new subsections to Section 17.4 specifying that any change in height of one foot or greater, any change in coordinates of one second or greater, or any change in marking and lighting specifications requires prior approval from the FAA and the Commission. These proposed changes are intended both to promote aircraft navigation safety and to ease regulatory burdens by streamlining regulations and reducing confusion. The Commission also proposes to consider whether to specify accuracy standards or survey methods in order to ensure consistency of data. The Commission seeks to hear about alternative rules that would achieve the same goals while reducing burdens to small business.

70. The Commission proposes to delete Sections 17.7 and 17.14 of the Commission's rules, which are restatements of FAA rules, and to substitute cross-references to relevant FAA rules in Section 17.4 of the Commission's rules. This change could ease burdens on regulated entities, including small businesses, by reducing the risk of confusion in the event the FAA were to change its criteria. The Commission seeks any alternatives to these proposed changes that would further reduce burdens on small business while achieving these goals.

71. The Commission proposes to amend its rules governing inspection and maintenance of lighting by: 1) amending Section 17.47 to eliminate or reduce requirements to perform inspections of lighting and light monitoring systems; 2) amending Section 17.48(a) to require antenna structure owners to provide continuously active notice to the FAA of lighting outages; and 3) deleting vague references to timely repair timeframes in Sections 17.48(b) and 17.56(a). The Commission seeks to receive suggestions as to possible alternatives in this area that would best balance the goal of eliminating unnecessary regulatory burdens with the imperative to preserve aircraft navigation safety, while reducing the burden on small entities.

72. The Commission proposes to delete Sections 17.45, 17.51, and 17.56(b), which set forth specific requirements for exhibiting and maintaining lights, because they are unnecessary and may create ambiguity in cases of conflict with FAA specifications. These proposed changes are intended both to promote aircraft navigation safety and to ease regulatory burdens on all regulated entities by streamlining regulations and reducing confusion. The Commission determined not to propose an exception to lighting requirements where lights are extinguished due to a loss of power beyond the owner's control because such an exception appears inconsistent with aircraft navigation safety. The Commission seeks alternative proposals, if any such proposals would reduce the burden on small entities.

73. Section 17.49 requires antenna structure owners to maintain a record of observed or otherwise known extinguishments or improper functioning of structure lights. The Commission proposes to add a requirement to maintain such records for two years and provide the records to the Commission upon request in order to balance the Commission's need to determine the compliance record against the burden of record retention on antenna structure owners. The Commission tentatively concludes that this proposal best balances the Commission's need for a compliance record against the burden of record retention. The Commission seeks to receive alternative proposals based on data regarding the burden this record retention would impose on antenna structure owners, including the alternative of eliminating the recordkeeping requirement entirely. Such alternative proposals should address the issue of reducing burdens on small business.

74. The Commission requests comment on whether to amend Section 17.50 to require use of the FAA's 'In Service Aviation Orange Tolerance Chart' to determine whether a structure needs to be cleaned or repainted and to specify how the chart is to be used. These changes may provide more

objective standards for gauging visibility. The Commission seeks alternative proposals that would achieve this goal while further reducing the burden on small business.

75. The Commission proposes to amend Section 17.2(a) of the Commission's rules to clarify both when a structure becomes, and when a structure ceases to be, an "antenna structure" under our rules. The Commission also proposes to amend Section 17.2(c) of the Commission's rules to clarify that the obligations of an "antenna structure owner" fall only on the owner of the underlying structure, and not on tenants, thus promoting clarity for all parties. The Commission seeks to receive alternate proposals that address the effects of these proposed rule changes in general, and more specifically on small entities.

76. The Commission asks commenters to address alternatives regarding whether the rules concerning antenna structures should be enforced against voluntarily registered structures, whether owners of antenna structures that do not require registration should be prohibited from registering their towers, and whether antenna structure owners who have voluntarily registered structures should be required to withdraw their registrations from the Commission's antenna structure database. Such action could reduce confusion by clarifying the regulatory status of these structures. The Commission seeks to receive alternate proposals addressing the benefits and drawbacks of such action, particularly with respect to its impact on antenna structure owners that are small businesses.

77. The Commission proposes to modify Section 17.4(g) to require that antenna structure owners display the ASR number so that it would be visible to a member of the general public who reaches the closest publicly accessible location near each point of access to the antenna structure. The Commission further proposes to delete the requirement that the ASR number be posted near the base of the antenna structure. The Commission tentatively concludes that amending the rule in this manner would clarify the obligations of antenna structure owners, promote timely remediation when lighting is observed to be malfunctioning or extinguished, and eliminate unnecessary postings. The Commission seeks alternate proposals that would best achieve these goals while reducing the burdens on small business.

78. Section 17.4(f) requires that antenna structure owners immediately provide copies of FCC Form 854R (antenna structure registration) to each tenant licensee and permittee. Sections 17.4(e) and 17.6(c) impose a similar requirement on the first licensee where the antenna structure owner is unable to file Form 854 because it is subject to a denial of Federal benefits under the Anti-Drug Abuse Act of 1988. The Commission proposes to amend these rules to allow the alternative of providing a link to the Commission's antenna structure registration website via paper or electronic mail. The Commission tentatively concludes that this proposal would best reduce the burden on regulated entities, including small businesses, while ensuring that tenant licensees and permittees remain informed. Thus, the Commission determined not to propose eliminating this requirement altogether or simply requiring antenna structure owners to provide their tenants with the ASR number. The Commission seeks alternative proposals that would achieve its goals.

79. The Commission determined not to propose eliminating Section 17.57 to increase to five days the time period for notifying the Commission of construction, dismantlement, and changes in height or ownership. The Commission notes that the existing time periods have not been shown to be inconsistent with FAA requirements and that they promote the accuracy of the Commission's information. The Commission seeks discussion of alternate proposals that will reduce burdens on small business, including discussion of any burdens the existing rule may impose.

80. The Commission proposes to delete Section 17.58, which was intended to promote compliance with procedures that are now obsolete. This change would streamline the antenna structure registration process, thereby easing the burden on regulated entities. The Commission seeks discussion of any alternative proposals that would also reduce burdens on small entities.

81. For each of the proposals in the Notice, we seek discussion, and where relevant, alternative proposals, on the effect that each prospective new requirement, or alternative rules, might have on small entities. For each proposed rule or alternative, we seek discussion about the burden that the prospective regulation would impose on small entities and how the Commission could impose such regulations while minimizing the burdens on small entities. For each proposed rule, we ask whether there are any alternatives the Commission could implement that could achieve the Commission's goals while at the same time minimizing the burdens on small entities. For the duration of this docketed proceeding, we will continue to examine alternatives with the objectives of eliminating unnecessary regulations and minimizing any significant economic impact on small entities.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

82. None.